OPERATOR MAINTENANCE
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) INTRODUCTION

PMCS INTRODUCTION

This work package contains operator PMCS requirements for the Joint Light Tactical Vehicle (JLTV). The PMCS tables contain checks and service requirements necessary to ensure the JLTV is ready for operation. Using the PMCS tables, perform maintenance at specified intervals.

PMCS WARNINGS AND CAUTIONS

Always observe the warnings and cautions appearing in PMCS table. Warnings and cautions appear before applicable procedures. Observe these warnings and cautions to prevent serious injury to personnel or prevent equipment from being damaged.

Do not ignore a warning light or buzzer. It could be a failure in an important system which could lead to serious injury to personnel or damage to equipment. Have the appropriate system checked immediately.

PMCS SAFETY ITEMS

If item to be checked or serviced is considered a safety item (seat belt, windshield, windshield wipers, mirror, lights, etc.) refer to AR 385-10 safety standards. If item is not present, unserviceable, or inoperable, refer to approving authority who can make decision to authorize dispatch of vehicle or vehicle operation with deficiency present.

EXPLANATION OF COLUMNS

Item No. Column. Checks and services are numbered in a logical order for moving around the equipment.

Interval Column. This column identifies when PMCS should be performed. PMCS may be more frequent if operation is under severe conditions.

- Perform PMCS - Before prior to using the equipment.
- Perform PMCS - During while the equipment is in operation.
- Perform PMCS - After immediately after equipment use.
- Perform PMCS - Monthly once a month.

Item To Be Checked or Serviced Column. This column identifies item to be inspected and contains all information required to do check/inspection. An illustration is supplied to aid user in identifying items. Whenever replacement is recommended, reference is made to applicable maintenance instructions.

Procedure Column. This column explains what needs to be checked or serviced on that particular item.

Not Mission Capable If: Column. This column contains a brief statement of condition that would cause equipment to be less than fully ready to perform its assigned mission.

PREVENTIVE MAINTENANCE CHECKS AND SERVICES

- Ensure JLTV is on level ground prior to performing PMCS.
- When a deficiency is found, try utilizing BII tools to resolve problem prior to notifying Field Maintenance.
- If JLTV condition prevents PMCS, troubleshoot and utilize BII tools to repair deficiency prior to notifying Field Maintenance.
- If component(s) appear to have deficiencies that cannot be repaired, annotate the deficiency on DA Form 2404 or DA Form 5988-E. If deficiency appears to be harmful to personnel or environment, report it to Field Maintenance.
- When performing PMCS, take necessary tools and rags to perform all checks.

- Always perform PMCS in the prescribed order to maintain efficiency. Refer to Figure 1.

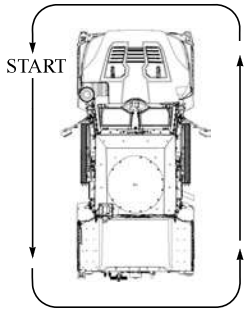


Figure 1. Routing Diagram.

GENERAL MAINTENANCE PROCEDURE

Cleanliness. Dirt, grease, oil, and debris may cover deficiencies. Always clean vehicle (WP 0170) prior to PMCS .

Lubrication. Lubricate vehicle after washing according to lubrication instructions (WP 0174).

Nuts and Screws. Check for obvious looseness, missing, bent, or broken nuts and screws. Look for chipped paint, bare metal, or rust around screw heads.

Welds. Look for loose or chipped paint, rust, or gaps where parts are welded together.

Electric Wires and Connectors. Look for cracked or broken insulation, bare wires, and loose or broken connectors.

Fluid Lines and Fittings. Look for wear, damage, leaks, and ensure clamps and fittings are tight. Fluids and stains on or around fittings and connectors can be signs of leaks.

CORROSION PREVENTION AND CONTROL (CPC)

Corrosion prevention and control maintenance is a requirement. While performing PMCS, look for and always be aware of rust, peeling or blistering paint, and any damage that can cause corrosion. Inspect entire vehicle including specific areas mentioned in PMCS. Be aware of missing corrosion preventive compounds. Appearance and color of corrosion is dependent on the metal/components involved. Table 1 will aid in the visual identification of corrosion on specific metals. Reference the CPC information in General Information (WP 0001) for additional guidance and criteria when items have forms of corrosion present and how to record corrosion failures in the inspection record.

Table 1. Metal Corrosion.

METAL/COMPONENT	CORROSION APPEARANCE
Steel	Powdery Reddish Brown, Yellow, Black
Aluminum	Powdery White
Brass	Green
Electrical Connectors	Powdery White

FLUID LEAKAGE

NOTE

Any fuel leak shall render the JLTV not mission capable.

Accumulation of condensation below air dryer is normal and does not reflect a deficiency or leak.

It is necessary to know how fluid leakage affects the status of the JLTV. Following are types/classes of leakage you need to know to be able to determine the status of the JLTV. Learn these leakage definitions and remember - when in doubt, notify Supervisor. Equipment operation is allowed with minor leakage (Class I or II). Consideration must be given to fluid capacity in the item/system being checked/inspected. When in doubt, notify Supervisor.

When operating with Class I or II leaks, continue to check fluid levels as required in PMCS.

Class III leaks should be reported immediately to Supervisor.

Class I. Seepage of fluid (as indicated by wetness or discoloration) but not great enough to form drops.

Class II. Leakage of fluid great enough to form drops but not enough to cause drops to drip from item being checked/inspected.

Class III. Leakage of fluid great enough to form drops that fall from item being checked/inspected.

END OF WORK PACKAGE

OPERATOR MAINTENANCE
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - BEFORE

INITIAL SETUP:

Personnel Required
Crew Member - 2

References
AR 750-1
WP 0013
WP 0027
WP 0028
WP 0033
WP 0034
WP 0039
WP 0040
WP 0041
WP 0042
WP 0043
WP 0047
WP 0048
WP 0049
WP 0050
WP 0051
WP 0057
WP 0030
WP 0063
WP 0158
WP 0174

Equipment Condition
Vehicle parked (WP 0045)
Engine OFF (WP 0054)
Wheels chocked (WP 0046)
Suspension lock-out braces installed (WP 0167)

Table 1. Preventive Maintenance Checks and Services (PMCS) - Before

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			WARNING Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Lubricating Oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention. Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment. Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention.	
1	Before	(Driver Side Front) Wheel/Tire	1. Inspect tire (Figure 1, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 1, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect Central Tire Inflation System (CTIS) valve (Figure 1, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.

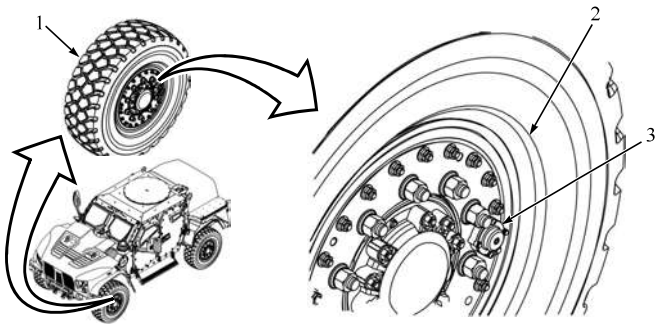


Figure 1. Wheel/Tire.

2	Before	(Driver Side Front) Fluid Leaks	Inspect driver side front for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
3	Before	(Driver Side Front) Splash Guard	Inspect splash guard (Figure 2, Item 1) for cracks and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

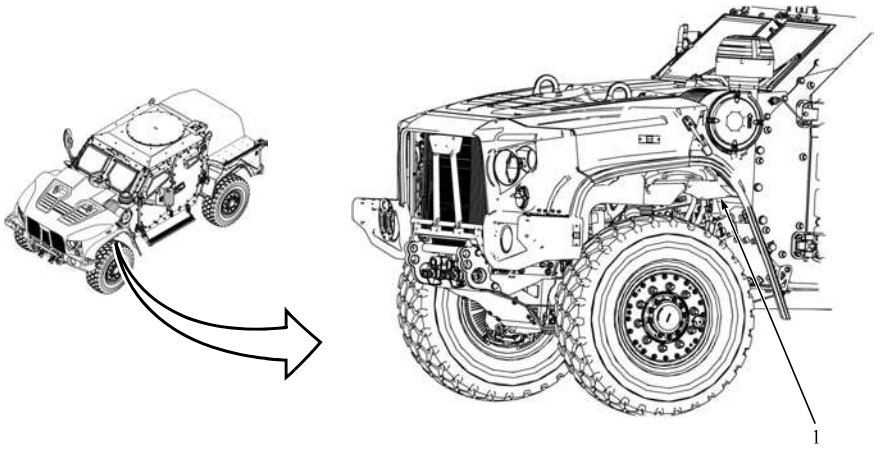


Figure 2. Splash Guard.

4	Before	(Driver Side) Doors and Ballistic Glass	1. Check front and rear doors, door latches, weldments, combat locks, and hinges for improper operation, binding, and damage (WP 0028).	Damage which prevents proper operation.
			2. Check front and rear door ballistic glass (Figure 3, Item 1) for delamination of inner layers, broken exterior glass exposing inner glass, excessive scratches which completely impair visibility, or large, deep through thickness cracks.	Ballistic glass delamination impairs operator's vision or cracked, broken, or damaged.

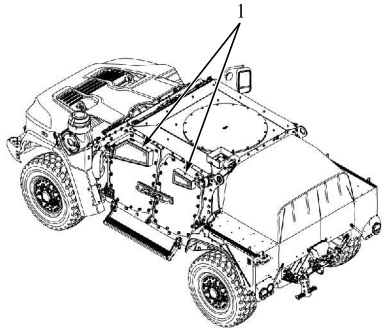


Figure 3. Doors and Windows.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
5	Before	(Driver Side Rear) Wheel/Tire	1. Inspect tire (Figure 4, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 4, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect CTIS valve (Figure 4, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.
6	Before	(Driver Side Rear) Splash Guard	Inspect splash guard (Figure 5, Item 1) for cracks and obvious damage.	

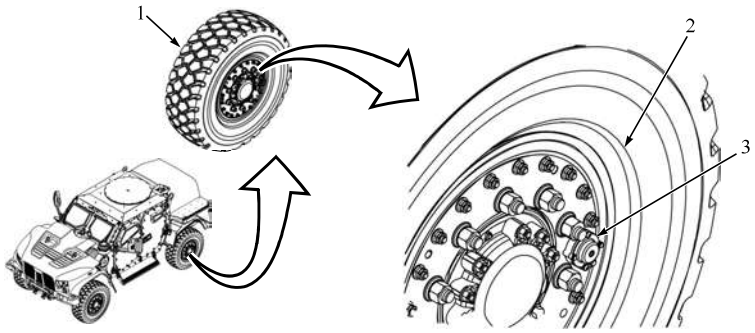


Figure 4. Wheel/Tire.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

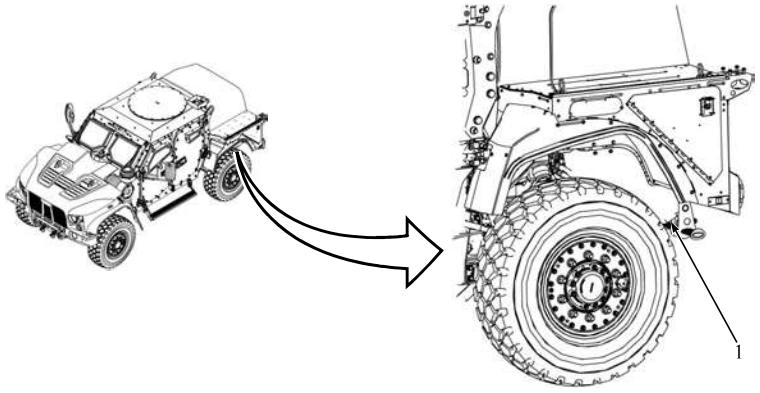


Figure 5. Splash Guard.

7	Before	(Driver Side Rear) Fluid Leaks	Inspect driver side rear for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
8	Before	(Rear of Vehicle) Gladhands	Check rear gladhand couplers (Figure 6, Item 1) and grommets (Figure 6, Item 2) for damage or missing gladhand covers.	

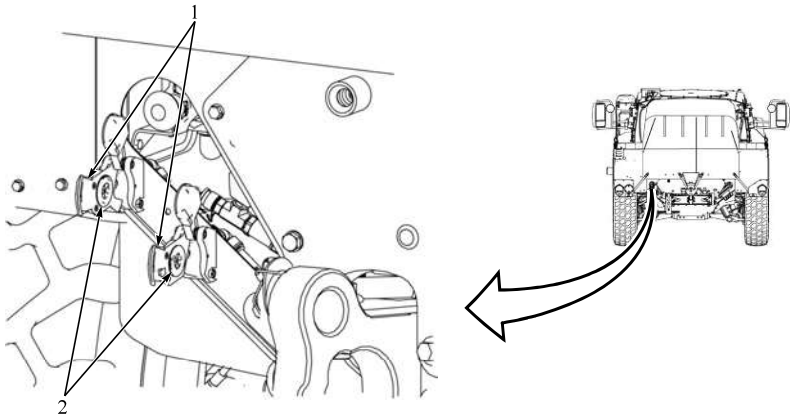
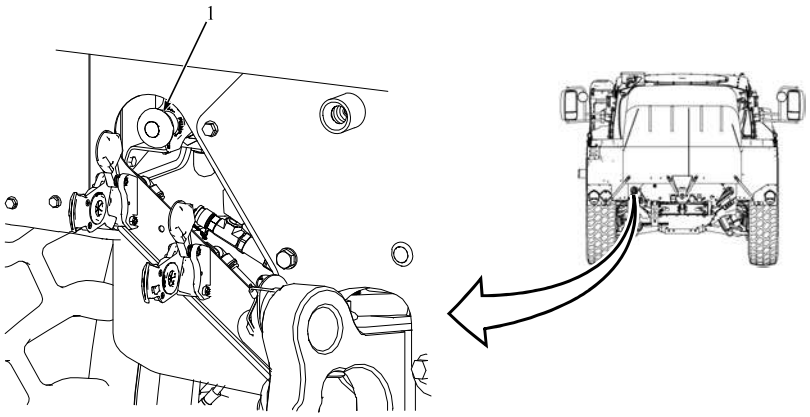
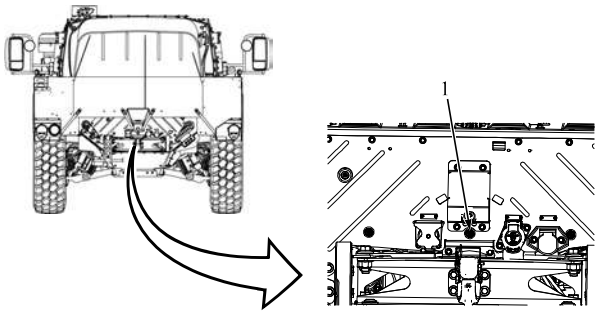
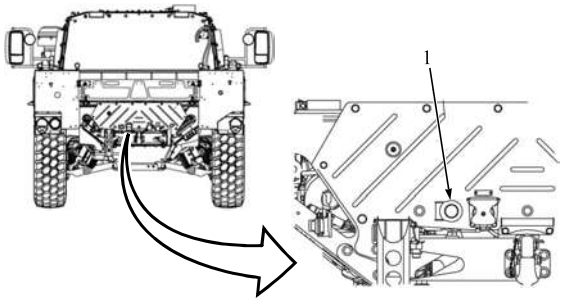
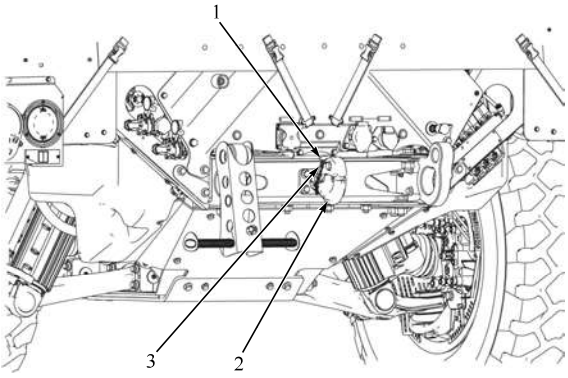


Figure 6. Gladhands.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
9	Before	(Rear of Vehicle) Fuel Priming Pump (if installed)	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Use a drain pan or suitable container to capture any draining, leaking or spilled fuel. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Immediately clean up spilled fuel. Keep cloths / rags away from open flame and / or ignition sources. Comply with local procedures and environmental regulations when disposing of unused fuel, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fuel. Failure to comply may result in injury to personnel and/or damage to the environment. **NOTE** Fuel priming pump is installed on A0 only. 1. Check fuel priming pump for proper operation (WP 0158). 2. Check fuel priming pump (Figure 7, Item 1) for leaks or damage.	Any fuel leak is present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 7. Fuel Priming Pump.**	
10	Before	(Rear of Vehicle) Rear Camera Lens	**NOTE** The following applies to A0 and A1 variants of M1278, M1280, and M1281 only. Inspect for broken, scratched, or dirty camera lens glass (Figure 8, Item 1).	
			 **Figure 8. Rear Camera.**	
11	Before	(Rear of Vehicle) Rear Camera Lens	**NOTE** The following applies to A0 and A1 variants of M1279 only. Inspect for broken, scratched, or dirty camera lens glass (Figure 9, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				
			Figure 9. Rear Camera.	
12	Before	(Rear of Vehicle) Pintle Hook	1. Inspect pintle hook (Figure 10, Item 2) for secure mounting, cracks, obvious damage, and proper operation. 2. Ensure safety latch (Figure 10, Item 1) engages hook lock (Figure 10, Item 2). 3. Ensure safety pin (Figure 10, Item 3) is secured and functional.	Safety latch does not engage. Safety pin missing or damaged.
				
			Figure 10. Pintle Hook.	
13	Before	(Rear of Vehicle) Tailgate	**NOTE** The following applies to A0 and A1 variants of M1279 only. Check tailgate for proper operation (WP 0030).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
14	Before	(Rear of Vehicle) Drain Valves and Control Manifold	1. Inspect drain valves (Figure 11, Item 2) for obvious damage.	Damage to valve is present which impairs vehicle operation.
			2. Ensure eight solenoid screws (Figure 11, Item 1) are positioned fully counterclockwise.	T2, T3, or R1 solenoid screws do not rotate freely.
15	Before	(Passenger Side Rear) Wheel/Tire	1. Inspect tire (Figure 12, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 12, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect CTIS valve (Figure 12, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.

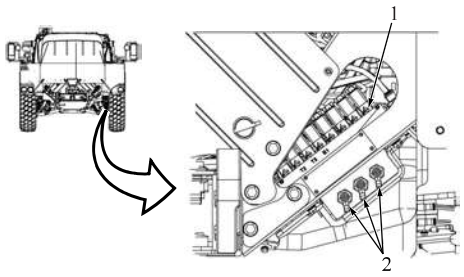


Figure 11. Drain Valves and Control Manifold.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

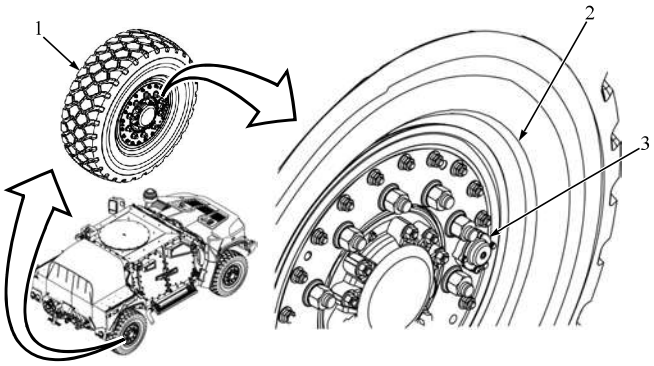


Figure 12. Wheel/Tire.

16	Before	(Passenger Side Rear) Fluid Leaks	Inspect passenger side rear for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
17	Before	(Passenger Side Rear) Splash Guard	Inspect splash guard (Figure 13, Item 1) for cracks and obvious damage.	

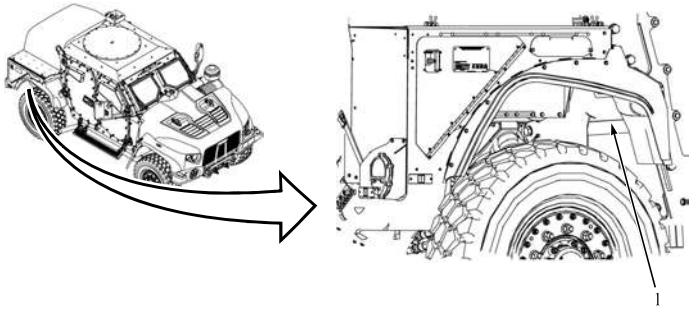


Figure 13. Splash Guard.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
18	Before	(Passenger Side Rear) Brake Reservoirs	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. **NOTE** Indicators on outside of reservoir. If necessary, bump reservoir to see fluid move. It is normal for brake fluid level to go down as brake pads wear. Brake fluid should not be replenished unless fluid level is below LOW line or as required due to maintenance. 1. Inspect two service brake reservoirs (Figure 14, Item 2) and one park brake reservoir (Figure 14, Item 1) for obvious damage and leaks. Ensure brake fluid is between FILL and LOW lines. If brake fluid is below LOW line, add brake fluid as necessary (WP 0174).	Any brake fluid leak present.

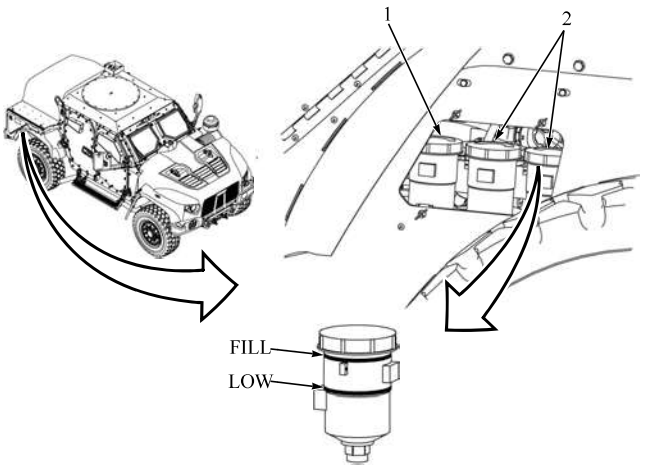


Figure 14. Passenger Side Rear Brake Reservoirs.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
19	Before	(Passenger Side) Doors and Ballistic Glass	1. Check front and rear doors, door latches, weldments, combat locks, and hinges for improper operation, binding, and damage (WP 0028). 2. Check front and rear door ballistic glass (Figure 15, Item 1) for delamination of inner layers, broken exterior glass exposing inner glass, excessive scratches which completely impair visibility, or large, deep through thickness cracks.	Damage which prevents proper operation. Ballistic glass delamination impairs operator's vision or cracked, broken, or damaged.

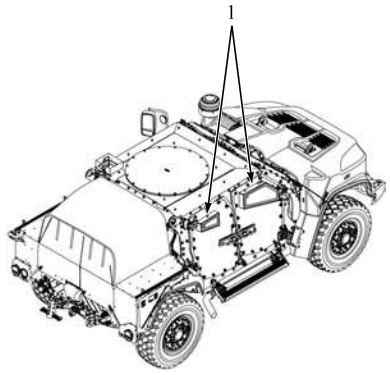
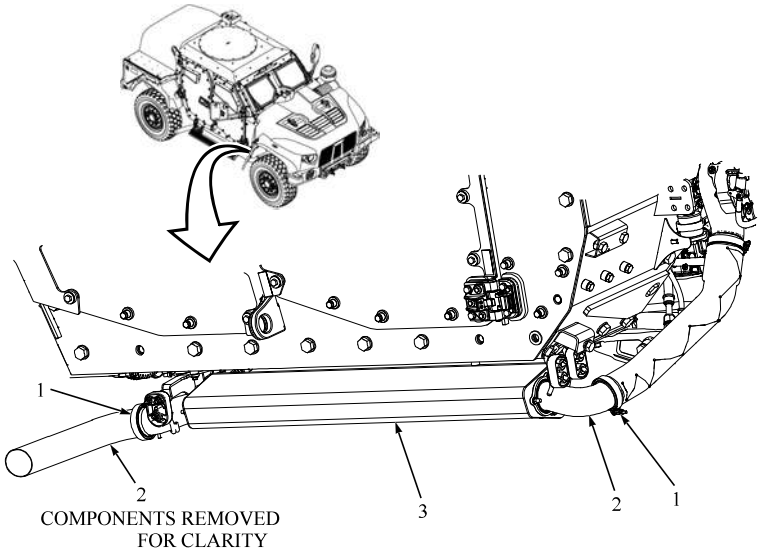
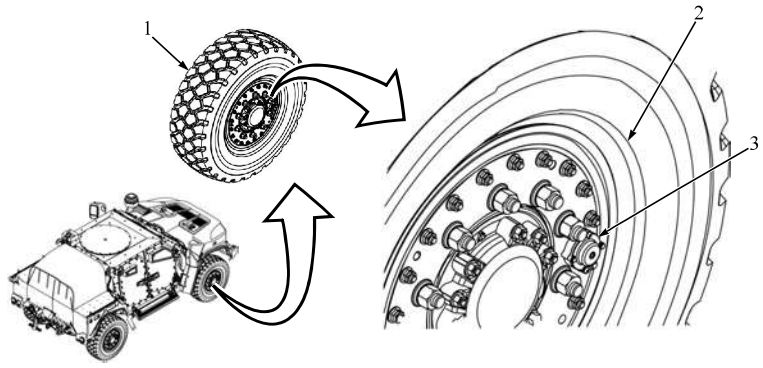
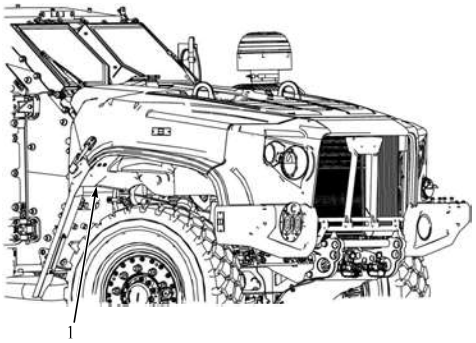
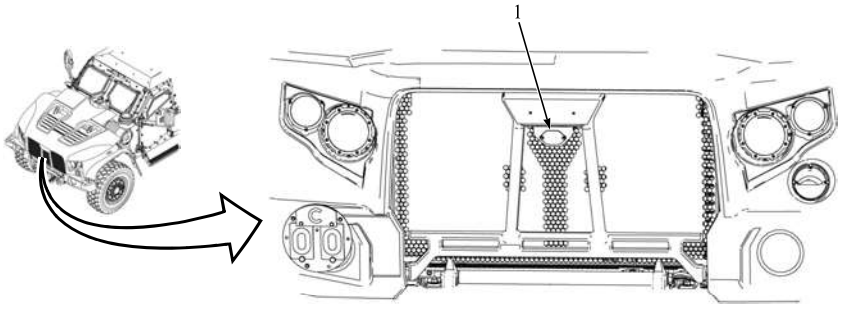
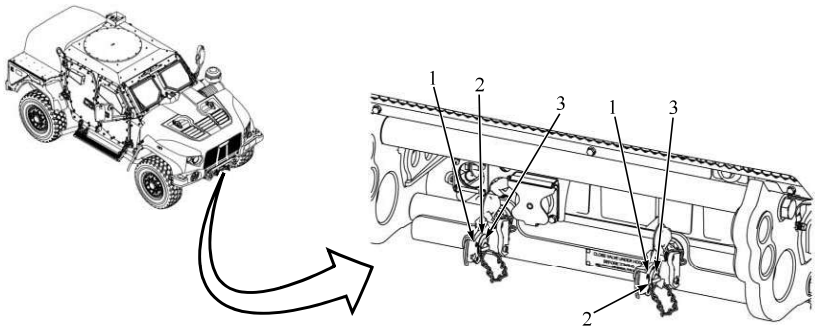


Figure 15. Doors and Windows.

20	Before	(Passenger Side) Muffler	Inspect muffler (Figure 16, Item 3), clamps (Figure 16, Item 1), and pipes (Figure 16, Item 2) for looseness, leaks, or damage.	Damage that impedes operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 16. Muffler.**	
21	Before	(Passenger Side Front) Wheel/Tire	1. Inspect tire (Figure 17, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 17, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect CTIS valve (Figure 17, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 17. Wheel/Tire.**	
22	Before	(Passenger Side Front) Fluid Leaks	Inspect passenger side front for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
23	Before	(Passenger Side Front) Splash Guard	Inspect splash guard (Figure 18, Item 1) for cracks and obvious damage.	
			 **Figure 18. Splash Guard.**	
24	Before	(Front of Vehicle) Front Facing Camera Lens	Inspect for broken, scratched, or dirty camera lens glass (Figure 19, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				
			Figure 19. Front Facing Camera Lens.	
25	Before	(Front of Vehicle) Gladhands	Inspect front gladhand couplers (Figure 20, Item 1) and grommets (Figure 20, Item 2) for damage or missing gladhand plugs (Figure 20, Item 3).	
				
			Figure 20. Gladhands.	
26	Before	(Front of Vehicle) Windshield	Inspect driver and passenger windshield ballistic glass (Figure 21, Item 1) for delamination of inner layers, broken exterior glass exposing inner glass, excessive scratches which completely impair	Ballistic glass delamination impairs operator's vision or cracked, bro-

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			visibility, or large, deep through thickness cracks.	ken, or damaged.

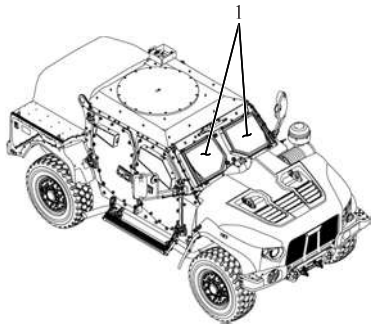


Figure 21. Windshield.

27	Before	(Underbody) Fluid Leaks and Damage	Inspect under vehicle for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
28	Before	(Engine Compartment) Driver Side Hood and Latch	1. Inspect hood (Figure 22, Item 1) for cracks and obvious damage. 2. Check hood latch (Figure 22, Item 2) for improper operation and obvious damage (WP 0041).	

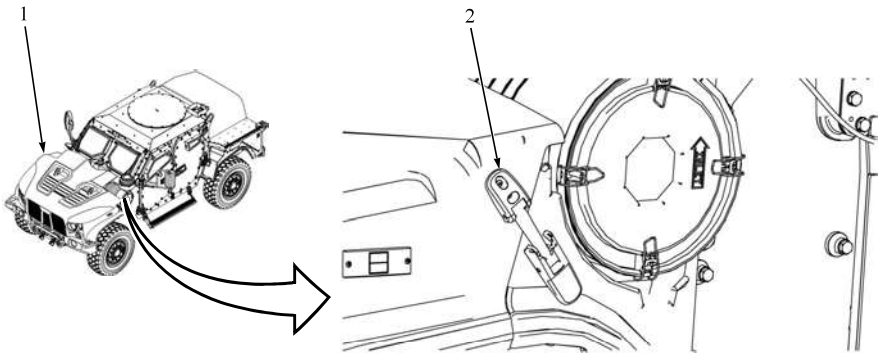


Figure 22. Hood.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
29	Before	(Engine Compartment) Passenger Side Hood and Latch	1. Inspect hood (Figure 23, Item 1) for cracks and obvious damage. 2. Check hood latch (Figure 23, Item 2) for improper operation and obvious damage (WP 0041).	

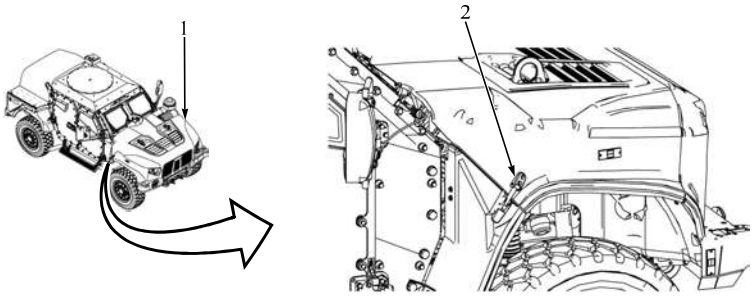


Figure 23. Hood.

30	Before	(Engine Compartment) Flat Tow Valve	1. Raise and support hood (WP 0041). 2. Ensure flat tow valve (Figure 24, Item 1) is in OPEN (NORMAL) position.	Flat tow valve is in CLOSED (TOWING) position.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

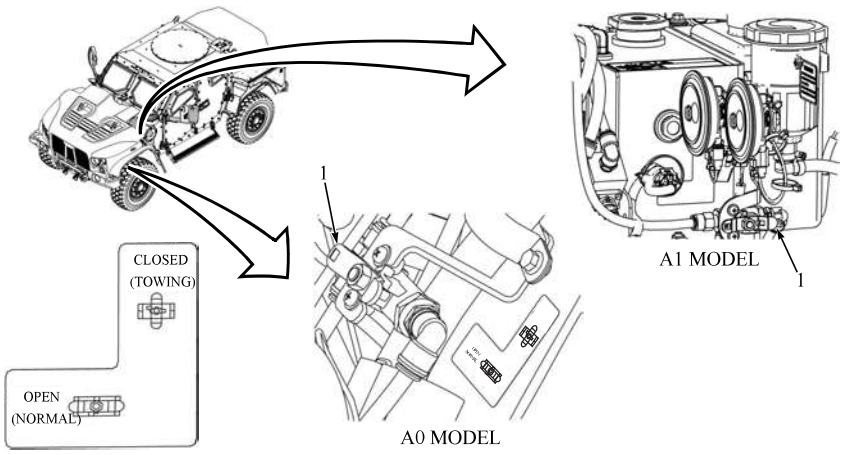


Figure 24. Flat Tow Valve.

31	Before	(Engine Compartment) Air Cleaner	Inspect air cleaner (Figure 25, Item 1) for obvious damage, loose, or missing hardware.	Air cleaner missing or damage that impairs operation.

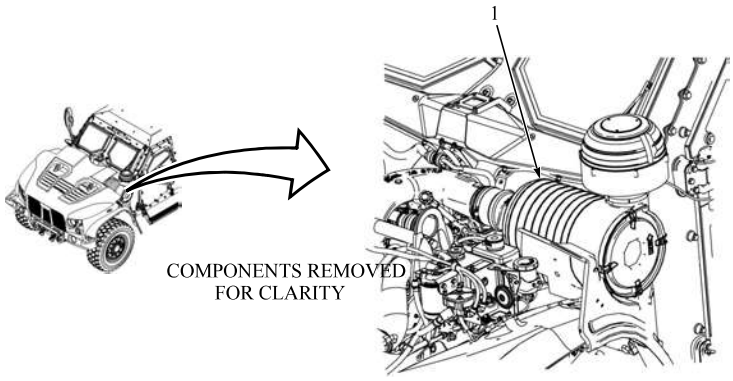


Figure 25. Air Cleaner.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
32	Before	(Engine Compartment) Driver Side Brake Reservoir	**NOTE** Indicators on outside of reservoir. If necessary, bump reservoir to see fluid move. It is normal for brake fluid level to go down as brake pads wear. Brake fluid should not be replenished unless fluid level below LOW line or as required due to maintenance. Inspect brake reservoir (Figure 26, Item 1) for obvious damage, leaks, and to ensure brake fluid between FILL and LOW lines. If brake fluid is below LOW line, add brake fluid as necessary (WP 0174).	Any brake fluid leak is present.

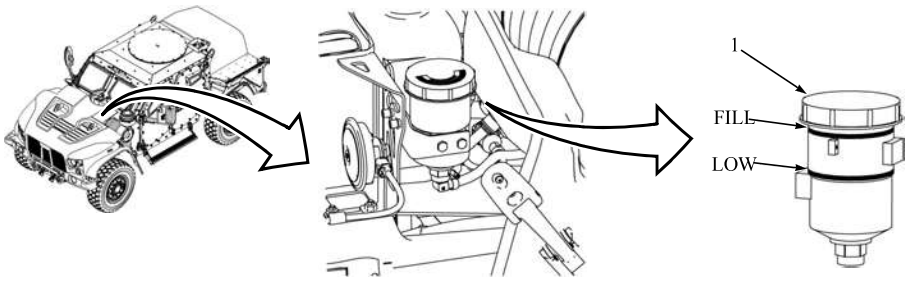


Figure 26. Driver Side Brake Reservoir.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
33	Before	(Engine Compartment) Passenger Side Front Brake Reservoir	**NOTE** Indicators are located on outside of reservoir. If necessary, bump reservoir to see fluid move. It is normal for brake fluid level to go down as brake pads wear. Brake fluid should not be replenished unless fluid level below LOW line or as required due to maintenance. Inspect brake reservoir (Figure 27, Item 1) for obvious damage, leaks, and to ensure brake fluid is between FILL and LOW lines. If brake fluid is below LOW line, add brake fluid as necessary (WP 0174).	Any brake fluid leak is present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

Figure 27. Passenger Side Front Brake Reservoir.

34	Before	(Engine Compartment) Transmission Fluid - Cold Check	Inspect transmission dipstick (Figure 28, Item 1) and ensure fluid level is within COLD range.	

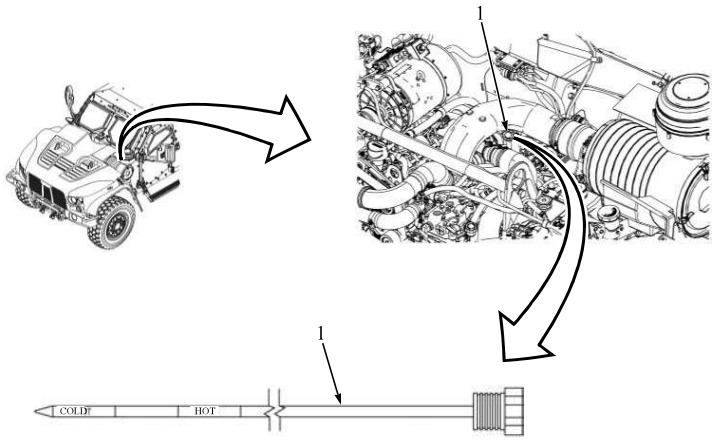


Figure 28. Transmission Fluid.

35	Before	(Engine Compartment) Fluid Leaks	Inspect engine compartment for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
36	Before	(Engine Compartment) Cooling System	**WARNING** If engine has been recently operated, then cooling system is hot and pressurized. Allow system to cool prior to cleaning. Failure to comply may result in injury or death to personnel. **CAUTION** Use care when cleaning radiator fins, charge air cooler fins, A/C condenser fins, and transmission oil cooler fins to prevent bending fins. Failure to comply may result in damage to equipment. Inspect radiator (Figure 29, Item 2), transmission oil cooler (Figure 29, Item 1), clamps, tubes, and hoses for leaks, cuts, loose hose clamps, debris, buildup, and other obvious damage.	Any class III leak present or damage which prevents proper operation.

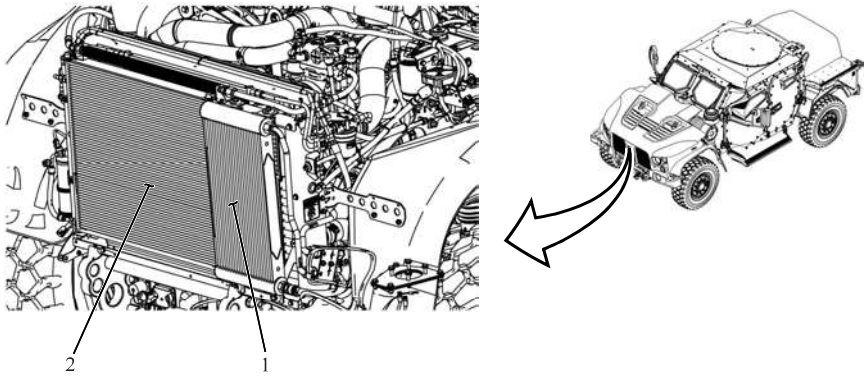
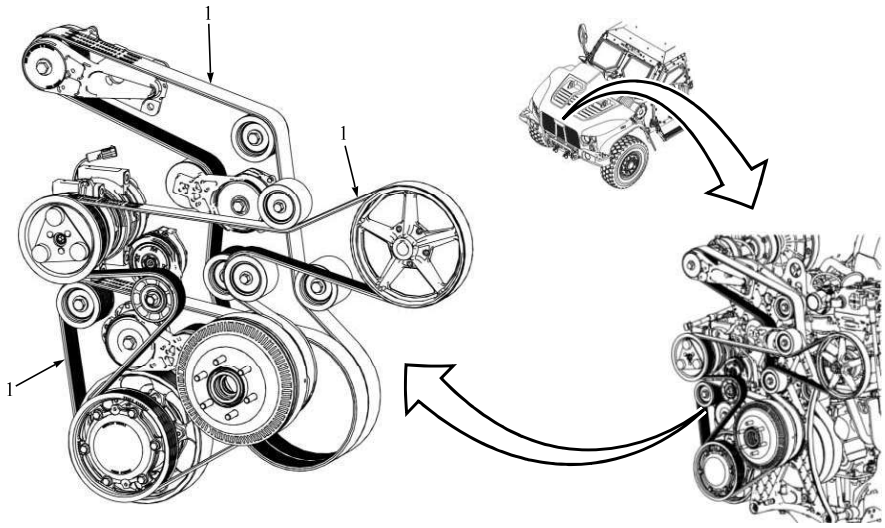
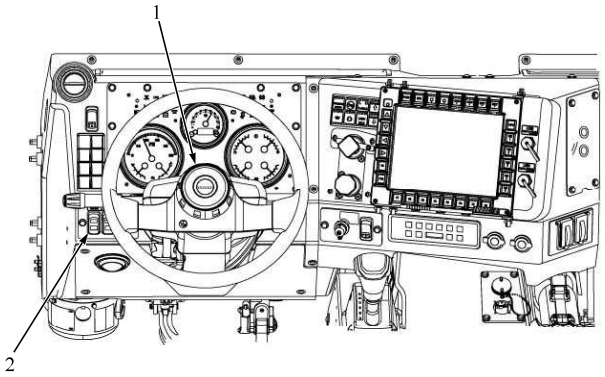


Figure 29. Cooling System.

37	Before	(Engine Compartment) Accessory Drive/ Belts	Inspect that belts (Figure 30, Item 1) are present and check for cracking, fraying, glazing, and other damage.	Drive belts are cracked, frayed, glazed, missing, or damaged.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
 **Figure 30. Accessory Drive/ Belts.**				
38	Before	(Crew Compartment) Mirrors	Check mirrors for proper operation and damage (WP 0051).	Any mirror missing, inoperable, unusable, or crack that impair driver vision.
39	Before	(Crew Compartment) Horn	1. Turn VEH BAT switch (Figure 31, Item 2) ON. 2. Push horn button (Figure 31, Item 1) to verify horn is working properly.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 31. Horn Button.**	
40	Before	(Crew Compartment) Cab Automatic Fire Extinguishing System (AFES)	**WARNING** Open flame inside cab will activate fire suppression system. Cab interior fire suppression system uses optical fire detectors. Do not smoke or have open flame inside cab. Failure to comply may result in injury to personnel. 1. Inspect and ensure optical sensors (Figure 32, Item 1) and (Figure 32, Item 3) are in position, clear of dirt, dust, and not obstructed or damaged. 2. Turn ignition switch to ON position (WP 0054). **NOTE** Wait 15 seconds after ignition switch is ON to check POWER LED on cab AFES control panel. 3. Inspect cab AFES control panel (Figure 32, Item 2) POWER LED (Figure 32, Item 4) for solid illumination.	POWER LED red, flashing, or not illuminated.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			4. Inspect if cab AFES control panel (Figure 32, Item 2) FAULT LED (Figure 32, Item 5) is off.	FAULT LED flashes.

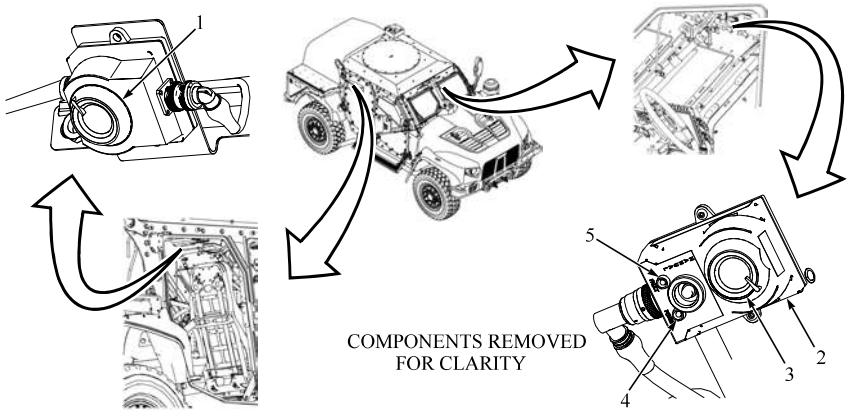
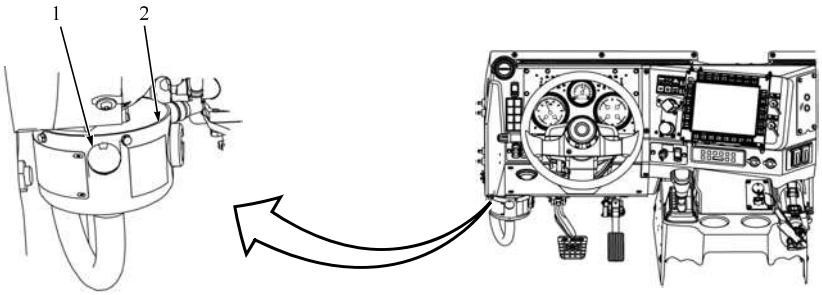
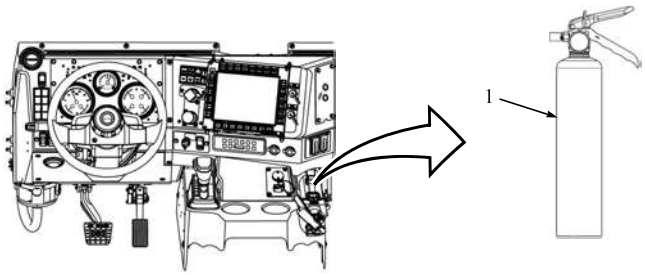


Figure 32. Cab AFES Control Panel.

			NOTE Pressure gauge must be checked when cab temperature is above 0 °F (-17.8 °C). If cab temperature is below 0 °F (-17.8 °C), utilize HVAC to heat vehicle to minimum inspection criteria.	
			5. Inspect pressure gauge (Figure 33, Item 1) on extinguisher cylinder (Figure 33, Item 2) for indicator needle positioning, discharged condition, and inspect extinguisher cylinder for damage.	Gauge indicator not in green range of gauge or extinguisher cylinder damaged.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				
			Figure 33. Cab AFES Fire Extinguisher.	
41	Before	(Crew Compartment) Fire Extinguisher	1. Inspect fire extinguisher (Figure 34, Item 1) for proper charge, obvious damage, or broken or missing seal. 2. Inspect fire extinguisher (Figure 34, Item 1) for contents replaced date and replace if cylinder contents are over 6 years old.	Fire extinguisher not present, not properly charged, or seal broken or missing. Fire extinguisher is out of date.
				
			Figure 34. Fire Extinguisher.	
42	Before	(Crew Compartment) Seat Belts and Seats	1. Check seat belts and buckles for proper operation (WP 0048). 2. Check seats for proper operation (WP 0047).	Damaged, missing, or inoperable seat belts.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
43	Before	(Crew Compartment) Vehicle Systems	1. Start Driver Smart Display Unit (DSDU) and check for proper operation (WP 0034).	DSDU does not power on or is inoperative.
			2. Check main instrument panel for illuminated warning indicators (WP 0013).	Any warning indicator illuminated red.
			3. Navigate to SYSTEM CHECKS screen of DSDU (WP 0034).	
			4. On SYSTEM CHECKS screen of DSDU, inspect and ensure status icons (Figure 35, Item 1), level icons (Figure 35, Item 2), and pressure icon (Figure 35, Item 3) are green.	Any warning indicator illuminated red.
			5. Refer to main instrument panel to inspect fuel level on LCD screen (WP 0043).	
			6. Check fuel level gauge for proper fuel level (WP 0013).	
			7. If installed, check Commander Smart Display Unit (CSDU) for proper operation (WP 0033).	
			8. If installed, check Auxiliary Smart Display Unit (ASDU) for proper operation (WP 0027). **NOTE** Perform this inspection on A0 and A1 variants of M1281 only.	
			9. Check Tube-Launched, Optically Tracked, Wire Guided (TOW) Missile	Unable to achieve TOW

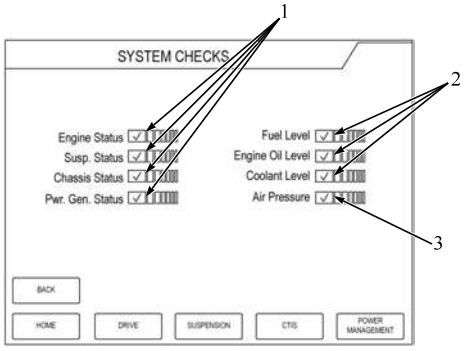


Figure 35. DSDU.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			Safe Fire Condition for proper operation (WP 0057).	missile safe fire condition.
44	Before	(Crew Compartment) Starter	**CAUTION** Verify oil pressure is indicated on oil pressure gauge when engine starts. Failure to comply may result in damage to equipment. Start engine (WP 0054) and listen for slow cranking operation or unusual noises when cranking.	Fails to crank, slow crank, or unusual starter noise.
45	Before	(Crew Compartment) HVAC System	**NOTE** Check heater for proper operation if ambient temperature is below 65 °F (18 °C). Check A/C for proper operation if ambient temperature is above 65 °F (18 °C). 1. Inspect HVAC controls for proper operation in all settings (WP 0040). **NOTE** Perform rear fan control inspection on A0 and A1 variants of M1278, M1280, and M1281 only. 2. Inspect rear fan control for proper operation in all settings (WP 0040).	Vehicle crew compartment air conditioning is inoperable. Rear fan is inoperable.
46	Before	(Crew Compartment) Intercom	If installed, check intercom system for proper operation (WP 0042).	Intercom does not operate as intended (if installed).
47	Before	(Crew Compartment) Windshield Wiper/ Washer	Check windshield wiper/washer system for proper operation (WP 0063).	Windshield wipe arms or blades missing.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
48	Before	(Crew Compartment) Parking Brake	**WARNING** Prior to performing parking brake test, ensure area approximately 30 ft (9 m) in front of vehicle is clear of objects and personnel. Failure to comply may result in injury or death to personnel. If vehicle moves during parking brake test, release throttle immediately and apply service brake. Failure to comply may result in injury or death to personnel. With parking brake (Figure 36, Item 1) applied and service brake (Figure 36, Item 3) released, shift transmission selector (Figure 36, Item 2) into D (drive) and run engine up to 1,000 RPM. Vehicle should not move. If vehicle moves, release throttle immediately and apply service brake.	Vehicle moves when parking brake is applied.

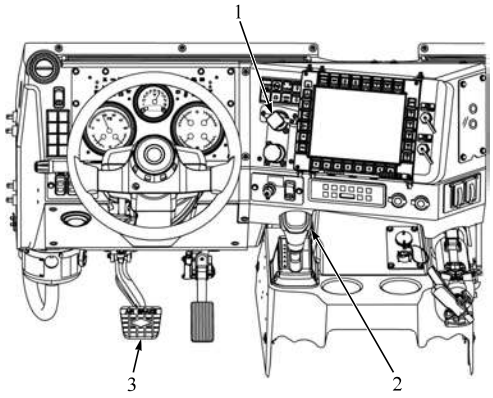


Figure 36. Parking Brake Test.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
49	Before	(Crew Compartment) Service Brakes	**WARNING** Prior to performing service brake test, ensure area approximately 30 ft (9 m) in front of vehicle is clear of objects and personnel. Failure to comply may result in injury or death to personnel. If vehicle moves during service brake test, release throttle immediately and apply parking brake. Failure to comply may result in injury or death to personnel. With service brake (Figure 37, Item 3) applied and parking brake (Figure 37, Item 1) released, shift transmission shift lever (Figure 37, Item 2) into D (drive) and run engine up to 1,000 RPM. Vehicle should not move. If vehicle moves, release throttle immediately and apply parking brake.	Vehicle moves when service brake is applied.
50	Before	(Crew Compartment) Lights	1. While inspecting lights, inspect reflectors for serviceability. **NOTE** Light inspections require aid of an assistant. 2. Turn service lights ON (WP 0049).	

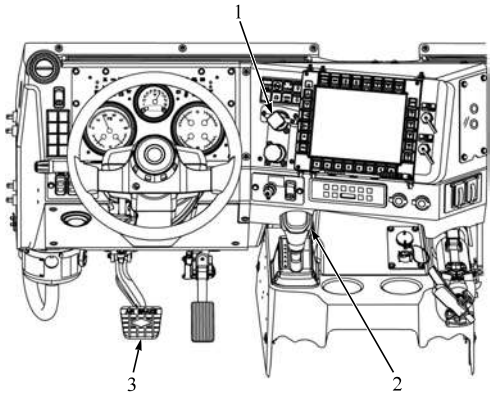


Figure 37. Service Brake Test.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			3. Check front and rear side marker lights and parking light function of composite lights for illumination (WP 0049). 4. Inspect marker lights (Figure 38, Item 3) for secure mounting, cracks, and obvious damage. 5. Inspect headlights (Figure 38, Item 1) for secure mounting, cracks, and obvious damage. 6. Inspect black out (B.O.) light (Figure 38, Item 4) for secure mounting, cracks, and obvious damage. 7. Inspect turn signal lights (Figure 38, Item 2) for secure mounting, cracks, and obvious damage.	

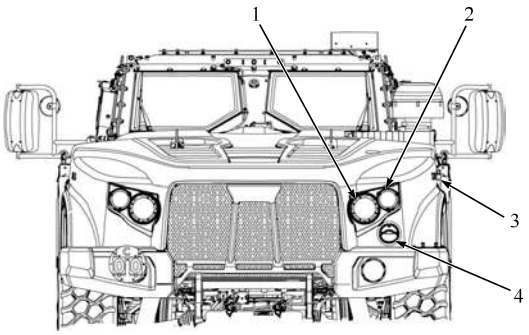


Figure 38. Lights.

			8. Inspect rear composite lights (Figure 39, Item 1) for secure mounting, cracks, and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

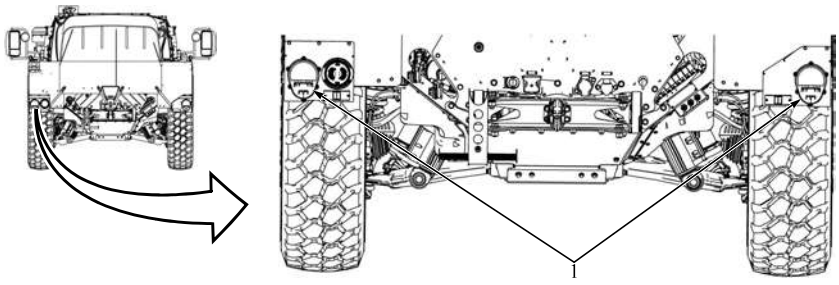


Figure 39. Lights.

		9. Inspect reverse light (Figure 40, Item 1) for secure mounting, cracks, and obvious damage.	

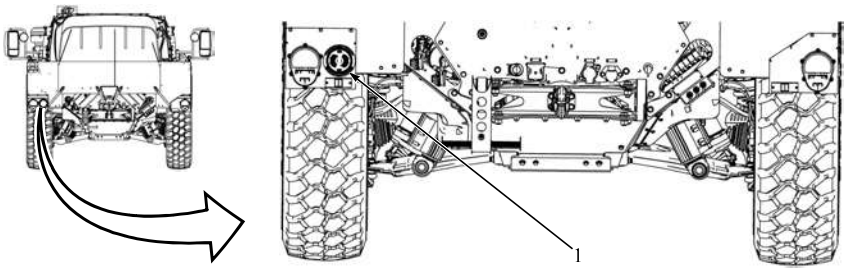
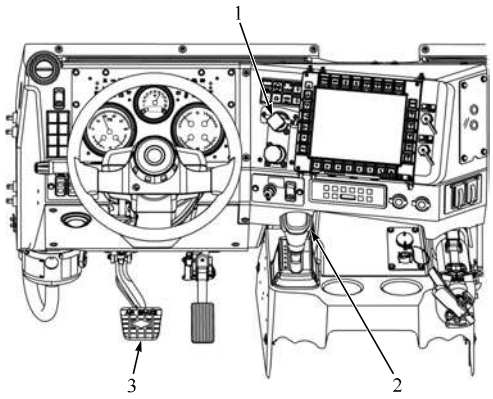
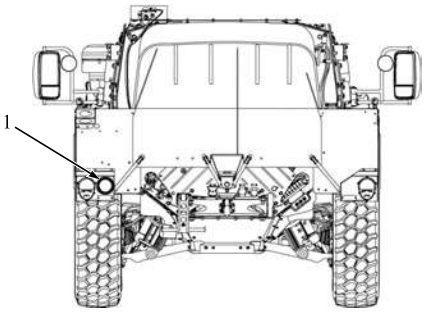


Figure 40. Lights.

		10. Check hazard function of front and rear composite lights to ensure blinking at same time (WP 0049). 11. Check driver side and passenger side turn signal function of front and rear composite lights to ensure lights blink (WP 0049). 12. Check headlights for illumination (WP 0049). 13. Check that headlights change from high beam to low beam and high beam indicator on dash operates properly (WP 0049).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			14. Check cab parking lights for illumination (WP 0049). 15. Check cargo bed parking lights for illumination (WP 0049). 16. Push down on service brake pedal (WP 0050) and check brake light function of rear composite lights for illumination (WP 0049). Release service brake pedal. 17. Turn B.O. switch ON (WP 0049). 18. Push down on service brake pedal (WP 0050) and check B.O. brake light function of rear composite lights for illumination (WP 0049). Release service brake pedal. 19. Check B.O. parking light function of rear composite lights for illumination (WP 0049). 20. Check B.O. headlight for illumination (WP 0049). 21. When light inspections are completed, ensure all lights are turned OFF (WP 0049).	
51	Before	(Crew Compartment) Reverse Light	**NOTE** Light inspections require aid of an assistant. 1. With service brake (Figure 41, Item 3) and parking brake (Figure 41, Item 1) applied, shift transmission selector (Figure 41, Item 2) into R (reverse).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 41. Reverse Light.**	
			2. Inspect reverse light (Figure 42, Item 1) for illumination.	
			 **Figure 42. Reverse Light.**	
52	Before	(Crew Compartment) Turret Gunner Restraint System (TGRS)	**NOTE** If TGRS harness not present, unserviceable, or inoperable, refer to Commander or their representative who can make decision to authorize dispatch of vehicle if gunner position is manned based on urgency of mission requirements (refer to AR 750-1). TGRS is applicable to A0 and A1 variants of M1278 and M1281 only.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			1. If equipped, inspect TGRS harness (Figure 43 Item 1) for any frayed, cut, or broken clips and straps.	Frayed, cut, or broken clips or straps. TGRS harness not present.
			2. Inspect gunner retractor belt (Figure 43, Item 2) for any cuts and damage. Check retractor with swift pull in any direction.	Retractor fails to lock.
			3. Inspect barrel nut (Figure 43 Item 3) for tightness and exposed threads.	Barrel nut not tight or threads exposed or damaged.
			4. Inspect emergency relief swivel (Figure 43, Item 4) for connection and ensure emergency relief swivel remains on retractor.	
			5. Check gunner restraint system for proper operation (WP 0039).	Gunner restraint does not operate as intended.

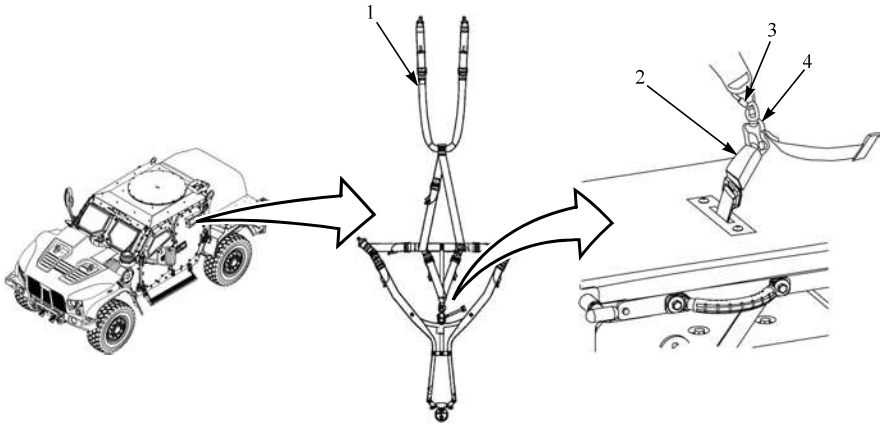


Figure 43. Turret Gunner Restraint System.

53	Before	(Crew Compartment) Egress Hatch Inspection	Inspect that egress hatch operates properly.	Hatch does not operate properly (unless operation is restricted by an installed shelter).

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
54	Before	(Crew Compartment) Blast Mats	Inspect blast mats.	Blast mats or rivets are missing, cracked, or damaged.
55	Before	(Crew Compartment) B-Kit Seat Blast Cushion Inserts	Inspect seat blast cushion inserts.	Seat blast cushion inserts or rivets are missing, cracked, or damaged.

END OF WORK PACKAGE

OPERATOR MAINTENANCE
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - DURING

INITIAL SETUP:
Personnel Required
Crew member - 2

References
WP 0034
WP 0035
WP 0061

Equipment Condition
Engine running at normal operating temperature (WP 0054)

Table 1. Preventive Maintenance Checks and Services (PMCS) - During

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

WARNING

Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Refer to local procedures and plans for preventing and responding to fuel spills or leaks.

Lubricating Oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention.

Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention.

Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment.

Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
1	During	Air System	**NOTE** Low air indicator will remain illuminated and warning buzzer will sound when air pressure gauges reach 65 psi (448 kPa). 1. Monitor and ensure both rear and front air pressure gauges (Figure 1, Item 1) indicate a reading between 110 and 130 psi (759 and 896 kPa) for normal operation. 2. While operating, listen for audible air leaks.	Low air indicator light is illuminated and vehicle braking system is severely degraded, preventing repeated stopping. Any leak is detected.

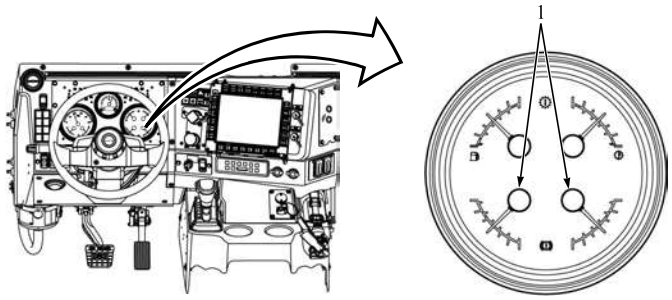


Figure 1. Air Pressure Gauges.

2	During	Gauge Check	**WARNING** Injury or death can occur if you ignore a warning light or buzzer. These signals tell you something is wrong with vehicle. An amber light will indicate a system needs to be checked when convenient. A red light means a system failure and needs to be checked immediately. Failure to comply may result in injury or death to personnel.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			CAUTION If oil pressure suddenly drops while driving, bring vehicle to a stop as soon as possible in a safe location and turn engine OFF. Wait a few minutes to allow oil level to stabilize and then check oil level. Add oil if necessary. If problem persists, notify Field Maintenance. Failure to comply may result in damage to equipment.	
			1. While operating, monitor and ensure oil pressure gauge (Figure 2, Item 9) indicates pressure at idle and increases with engine speed.	Oil pressure warning indicator is illuminated and vehicle is unable to sustain 15 MPH (24 km/h) forward speeds on improved surfaces.
			2. While operating, monitor and ensure tachometer gauge (Figure 2, Item 1) indicates 750 to 950 RPM when engine is idling and increases with engine speed while driving.	
			3. While operating, monitor and ensure cooling fan engages when water temperature gauge (Figure 2, Item 8) is at or over 220 °F (104 °C)	Cooling fan does not engage.
			4. While operating, monitor and ensure water temperature gauge (Figure 2, Item 8) reads between 175 and 240 °F (79 to 116 °C).	Water temperature warning indicator is illuminated or temperature is above 240 °F (116 °C).
			5. While operating, monitor and ensure transmission fluid temperature gauge (Figure 2, Item 6) reads below 240 °F (116 °C) and transmission temperature warning indicator (Figure 2, Item 7) is not illuminated.	Transmission temperature warning indicator is illuminated or temperature is above 240 °F (116 °C).

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			6. While operating, monitor and ensure fuel gauge (Figure 2, Item 5) functions.	
			7. While operating, monitor main instrument panel LCD (Figure 2, Item 4) to ensure voltage reads between 24 and 30 volts.	Loss of all vehicle electrical power, resulting in vehicle shutdown and vehicle is unable to be slave started.
			8. While operating, monitor and ensure speedometer (Figure 2, Item 3) indicates speed while driving.	
			9. While operating, monitor and ensure low oil level indicator (Figure 2, Item 2) does not illuminate.	

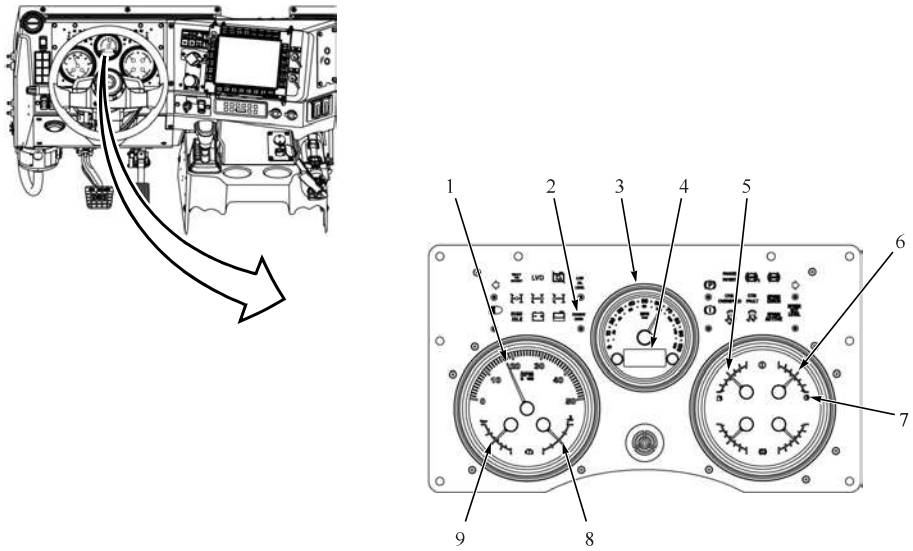


Figure 2. Gauges.

			10. While operating, navigate DSDU to DRIVE screen in VEHICLE INFO tab to monitor air restriction level (WP 0034).	
			11. While operating, monitor and ensure air restriction indicator (Figure 3, Item 1) reads below 30 in/	Air restriction indicator reads 30 in/H20 (7

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			H20 (7 kPa) restriction while vehicle is running. 12. Monitor DSDU for faults (WP 0034).	kPa) or above while vehicle is running.

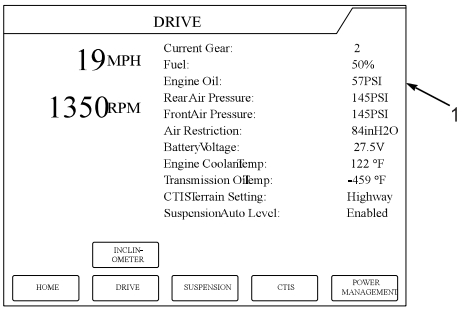


Figure 3. Air Restriction.

3	During	Engine	1. Monitor engine for excessive smoke, rough running, excessive vibration, unusual noises, or misfiring. **WARNING** Exhaust fumes are extremely dangerous when inhaled. If a dull headache, dizziness, nausea, vomiting, shortness of breath, confusion, or blurred vision is present, carbon monoxide poisoning may be a possible condition. Move to a clean environment where there is plenty of oxygen and ventilation. Failure to comply may result in injury or death to personnel. 2. Pay attention at all times during vehicle operation for unusual noises from engine compartment and excessive exhaust odors in cab. Presence of exhaust odors may be an indication of an exhaust leak.	Excessive smoke, rough running, excessive vibration, unusual noises, or misfiring. Exhaust in cab.
4	During	Transmission	While operating, monitor and ensure transmission shifts smoothly through	Transmission slips or does

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			gears and does not slip while accelerating or pulling (WP 0061).	not shift out of gear.
5	During	Brakes	1. While operating, monitor brakes for pulling, binding, or grabbing. 2. While operating, engage exhaust brake to ensure proper operation (WP 0035).	Brakes pull or grab.
6	During	Steering	While operating, monitor steering for difficulty turning, excessive free play, binding, and shimmying.	Difficulty turning, excessive free play, binding, or shimmying is detected in steering.
7	During	Accelerator Pedal	While operating, monitor for sticking, constant throttle control, or binding pedal.	Pedal is sticking or binding.
8	During	Powertrain	While operating, monitor engine, transmission, differentials, propeller shafts, halfshafts, transaxles, and wheels for unusual noise or vibration.	Unusual noise or vibration is detected.

END OF WORK PACKAGE

OPERATOR MAINTENANCE
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - AFTER

INITIAL SETUP:

Materials/Parts
Rags, Wiping (WP 0178, Item 31)

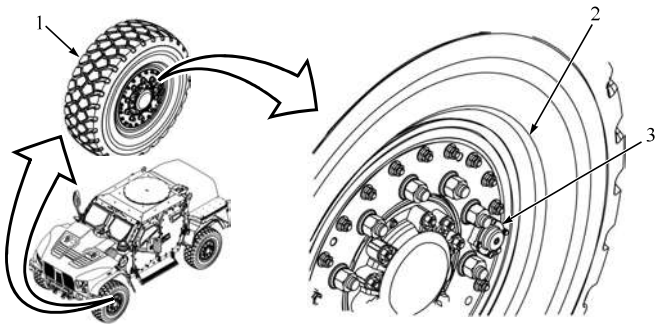
Personnel Required
Crew Member - 2

References
WP 0013
WP 0028
WP 0029
WP 0031
WP 0034
WP 0037
WP 0041
WP 0051
WP 0061
WP 0030
WP 0063
WP 0156
WP 0174

Equipment Condition
Vehicle cleaned IAW SOP (WP 0170)
Vehicle parked on level surface (WP 0045)
Suspension lock-out braces installed (WP 0167)
Engine OFF (WP 0054)
Hood raised and secured (WP 0054)

Table 1. Preventive Maintenance Checks and Services (PMCS) - After

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
WARNING Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Lubricating Oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention. Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention. Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment. Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention.				
1	After	(Driver Side Front) Wheel/Tire	1. Inspect tire (Figure 1, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 1, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect Central Tire Inflation System (CTIS) valve (Figure 1, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.
			 **Figure 1. Wheel/Tire.**	
2	After	(Driver Side Front) Vehicle Checks	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs.	
			1. Inspect steering components (Figure 2, Item 5) for obvious damage, looseness, and leaks.	Damage which prevents proper operation.
			2. Inspect service and park brake hose protectors (Figure 2, Item 2) for excessive abrasion.	
			3. Inspect service and park brake hose fittings for leaks or damage.	
			4. Inspect halfshaft (Figure 2, Item 3), boots (Figure 2, Item 4), and ball joint boots (Figure 2, Item 1) for leaks, rips, tears, and obvious damage.	Halfshaft boots or ball joint boots torn or any damage

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				that would impair vehicle operation.

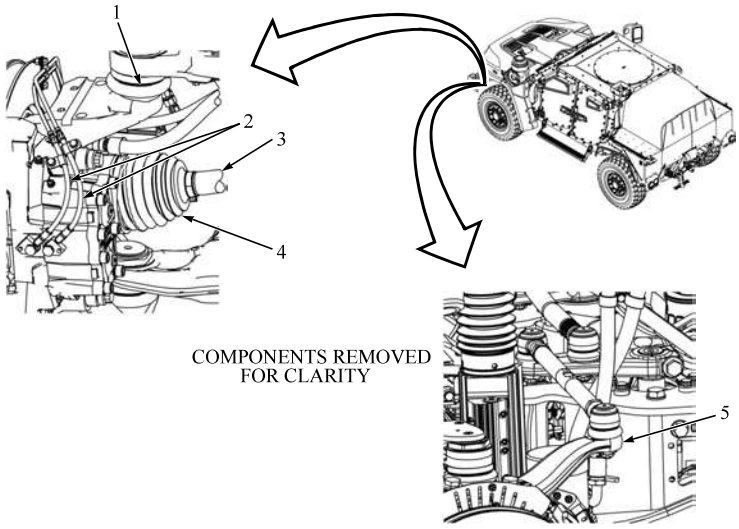
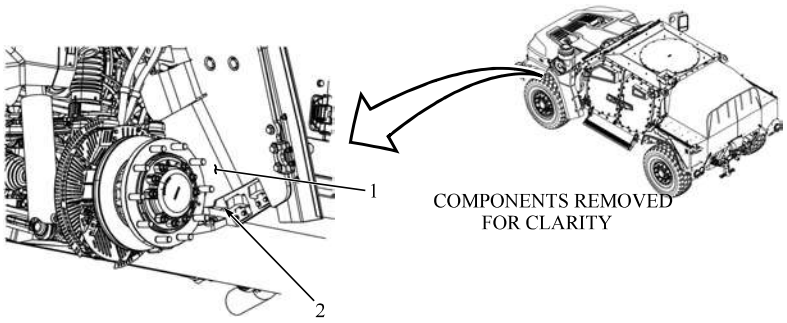
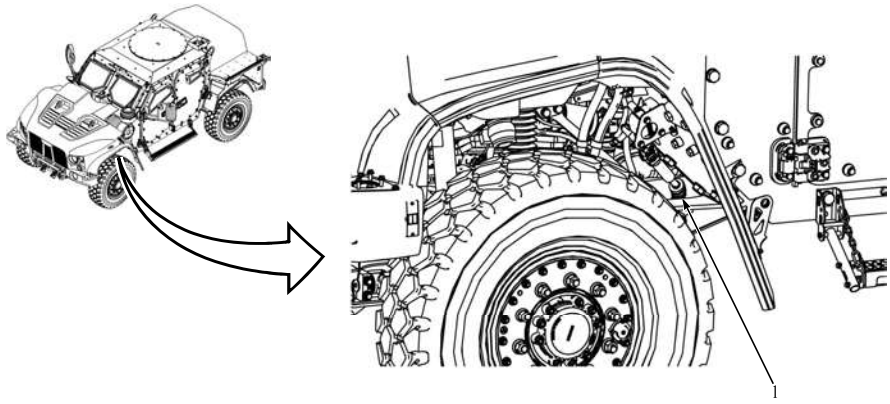


Figure 2. Driver Side Vehicle Checks.

3	After	(Driver Side Front) Wheel Deflector and Belly Armor (if armor installed)	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect area between belly armor (Figure 3, Item 2) and propeller shaft to verify it is clear of debris. 2. Inspect wheel deflector (Figure 3, Item 1) for missing components and obvious damage.	Debris found contacting propeller shaft.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 3. Wheel Deflector and Belly Armor Inspection.**	
4	After	(Driver Side Front) Steering Shaft Boot	Inspect boot (Figure 4, Item 1) for tears and obvious damage.	
			 **Figure 4. Steering Shaft Boot.**	
5	After	(Driver Side Front) Suspen-sion Inspec-tions	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			NOTE Shock absorbers may have a thin film of oil on outer surface due to a normal condition known as "misting". Misting is not considered a leak and will not be evident as a stream of fluid. 1. Inspect springs (Figure 5, Item 1) for leaks and obvious damage. 2. Inspect shocks (Figure 5, Item 2) for leaks and obvious damage.	Any leak present or damage to spring which may impair vehicle operation. Class III leak present or damage to shock which impairs vehicle operation.

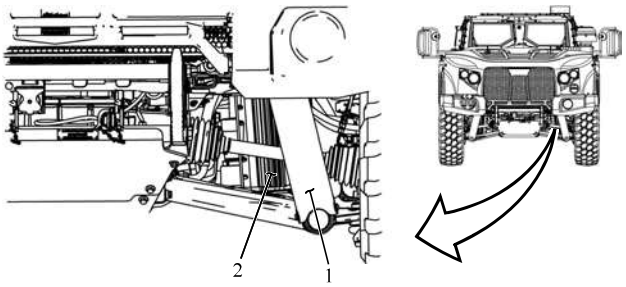


Figure 5. Suspension Inspections.

6	After	(Driver Side Front) Shock Absorber and Spring Caps	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect shock absorber cap (Figure 6, Item 1) for cracks, tears, or if missing.	Shock absorber cap missing or damage which prevents proper operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			2. Inspect spring cap (Figure 6, Item 2) for cracks, tears, or if missing.	Spring cap missing or damage which prevents proper operation.

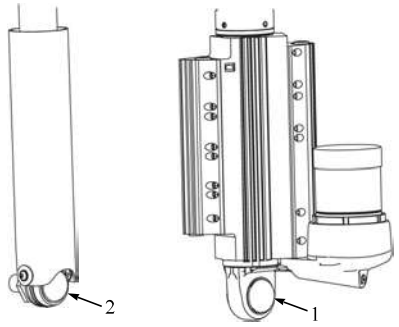


Figure 6. Shock Absorber and Spring Caps.

7	After	(Driver Side Front) Suspension Cross Plumbing Hoses	Inspect cross plumbing hoses (Figure 7, Item 1) for blisters, tears, and exposed metal braids.	Metal braids exposed or class III leak present.

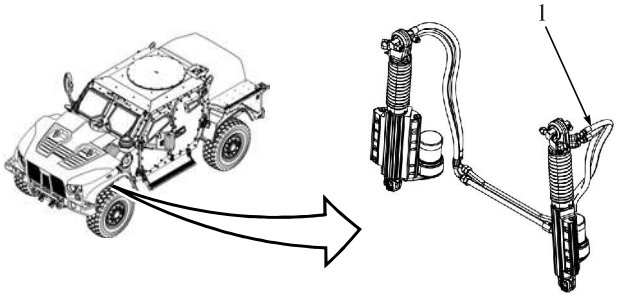


Figure 7. Suspension Cross Plumbing Hoses.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
8	After	(Driver Side Front) Jounce Bumper	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. Inspect jounce bumper (Figure 8, Item 1) for gouges, cracks, or if missing.	Jounce bumper missing or damage which prevents proper operation.

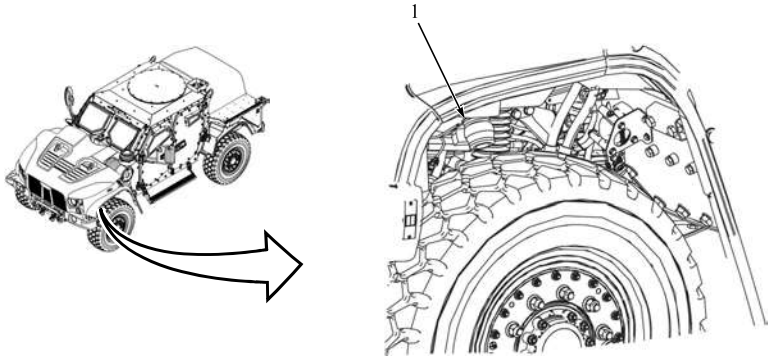
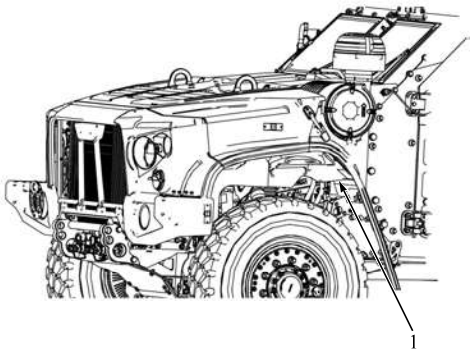
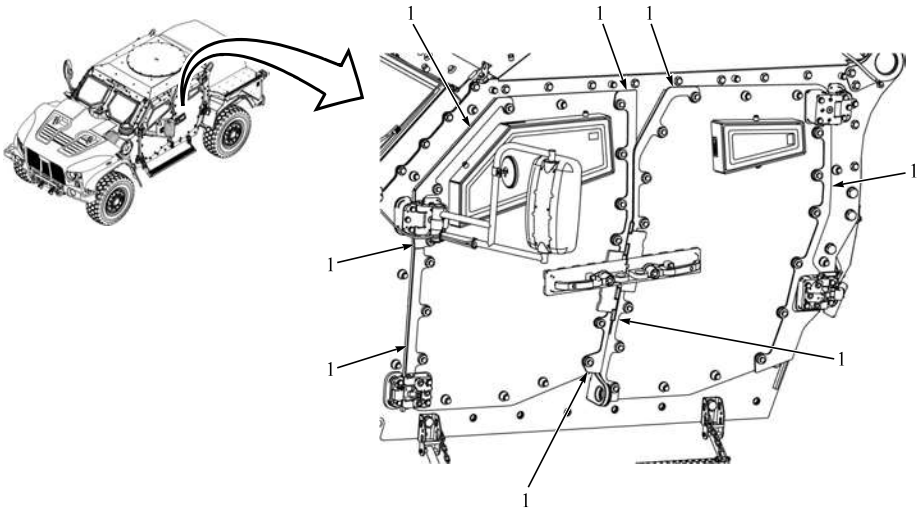


Figure 8. Jounce Bumper.

9	After	(Driver Side Front) Splash Guard	Inspect splash guard (Figure 9, Item 1) for cracks and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 9. Splash Guard.**	
10	After	(Driver Side Front) Fluid Leaks	Inspect driver side front for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
11	After	(Driver Side) Door Overlaps	Inspect door overlaps (Figure 10, Item 1) for obvious damage and loose hardware.	Missing, cracked, or damaged.
			 **Figure 10. Door Overlaps.**	
12	After	(Driver Side Rear) Wheel/Tire	1. Inspect tire (Figure 11, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect	Tire has wear or damage that allows ply or

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			wheel (Figure 11, Item 2) for broken, cracked, or bent surfaces.	belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect CTIS valve (Figure 11, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.

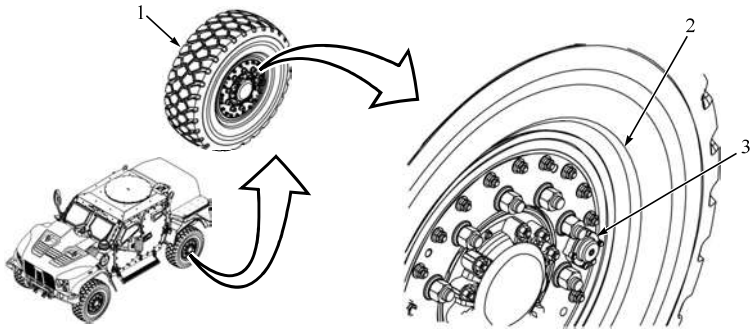


Figure 11. Wheel/Tire.

13	After	(Driver Side Rear) Wheel Deflector and Belly Armor (if armor installed)	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect area between belly armor (Figure 12, Item 2) and propeller shaft to verify it is clear of debris.	Debris found contacting propeller shaft.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			2. Inspect wheel deflector (Figure 12, Item 1) for missing components and obvious damage.	Components missing or damaged.

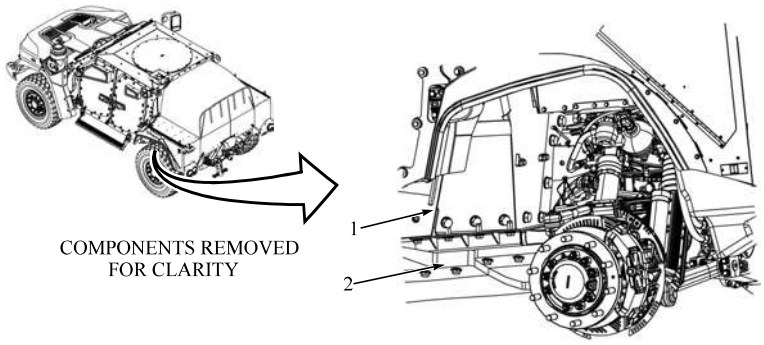


Figure 12. Driver Side Belly Armor Inspection.

14	After	(Driver Side Rear) Suspension Cross Plumbing Hoses	Inspect cross plumbing hoses (Figure 13, Item 1) for blisters, tears, and exposed metal braids.	Metal braids exposed or class III leak present.

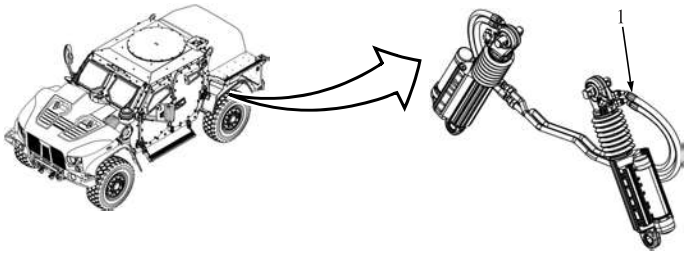


Figure 13. Suspension Cross Plumbing Hoses.

15	After	(Driver Side Rear) Jounce Bumper	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			Inspect jounce bumper (Figure 14, Item 1) for gouges, cracks, or if missing.	Jounce bumper missing or damage which prevents proper operation.

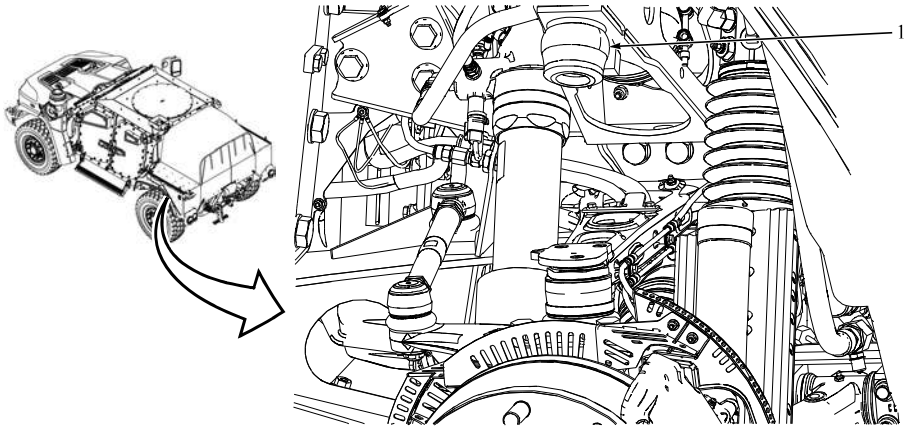


Figure 14. Jounce Bumper.

16	After	(Driver Side Rear) Stowage Boxes	**NOTE** The following applies to A0 and A1 variants of M1278 and 1280 only. 1. Visually inspect stowage boxes for proper operation (WP 0029). **NOTE** The following applies to A0 and A1 variants of M1281 only. 2. Visually inspect stowage boxes for proper operation (WP 0031). **NOTE** The following applies to A0 and A1 variants of M1279 only. 3. Visually inspect stowage boxes for proper operation (WP 0030).	
17	After	(Driver Side Rear) Fluid Leaks	Inspect driver side rear for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
18	After	(Rear of Vehicle) Lights	1. Inspect rear composite lights (Figure 15, Item 1) for secure mounting, cracks, and obvious damage.	

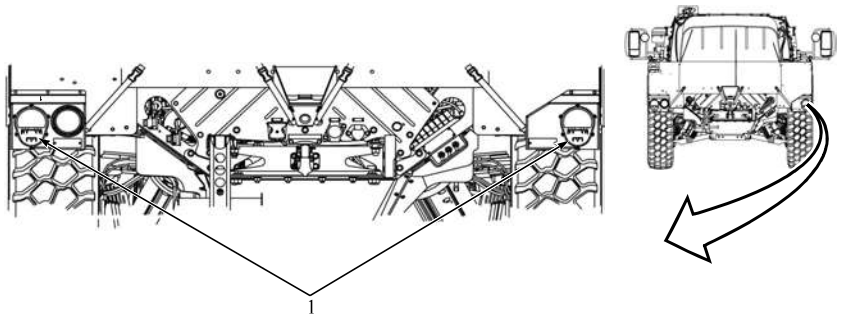


Figure 15. Lights.

			2. Inspect reverse light (Figure 16, Item 1) for secure mounting, cracks, and obvious damage.	

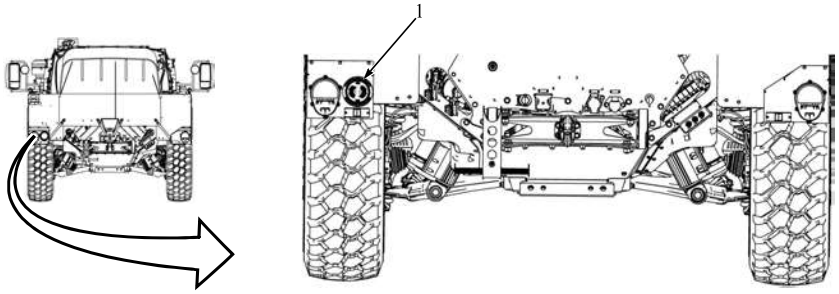
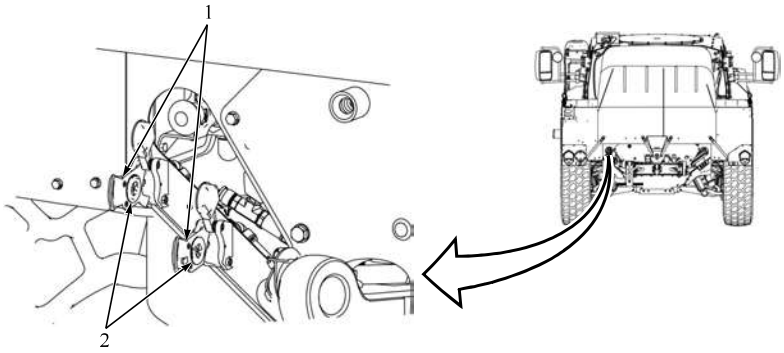
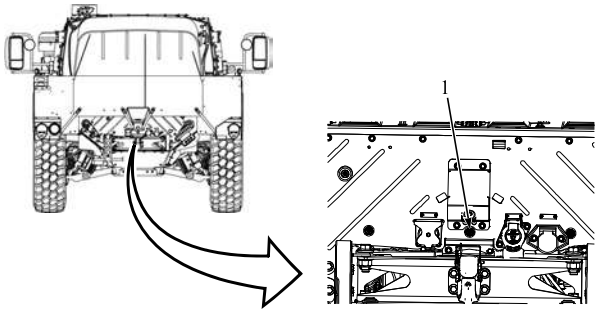
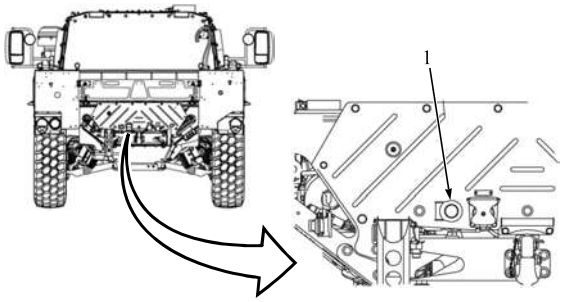
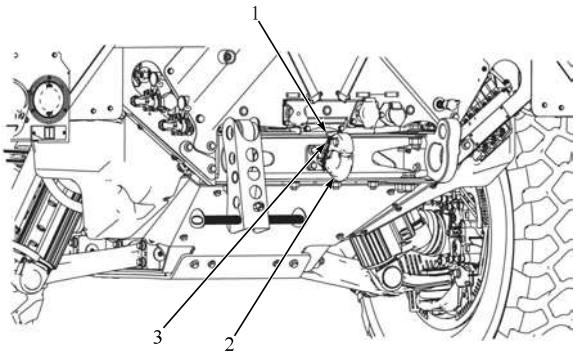


Figure 16. Lights.

19	After	(Rear of Vehicle) Gladhands	Check rear gladhand couplers (Figure 17, Item 1) and grommets (Figure 17, Item 2) for leaks, damage, or missing gladhand covers.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 17. Gladhands.**	
20	After	(Rear of Vehicle) Rear Camera Lens	**NOTE** The following applies to A0 and A1 variants of M1278, M1280, and M1281 only. Inspect for broken, scratched, or dirty camera lens glass (Figure 18, Item 1).	
			 **Figure 18. Rear Camera.**	
21	After	(Rear of Vehicle) Rear Camera Lens	**NOTE** The following applies to A0 and A1 variants of M1279 only. Inspect for broken, scratched, or dirty camera lens glass (Figure 19, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				
			Figure 19. Rear Camera.	
22	After	(Rear of Vehicle) Pintle Hook	1. Inspect pintle hook (Figure 20, Item 2) for secure mounting, cracks, obvious damage, and proper operation. 2. Ensure safety latch (Figure 20, Item 1) engages hook lock (Figure 20, Item 2). 3. Ensure safety pin (Figure 20, Item 3) is secured and functional.	Safety latch does not engage. Pintle hook unserviceable. Safety pin missing or damaged.
				
			Figure 20. Pintle Hook.	
23	After	(Passenger Side Rear) Wheel/Tire	1. Inspect tire (Figure 21, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 21, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				through tread or sidewall. Tire has tread or sidewall separation. Tire has audible leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect CTIS valve (Figure 21, Item 3) for leaks.	Air leak or damage to valve that impairs vehicle operation.

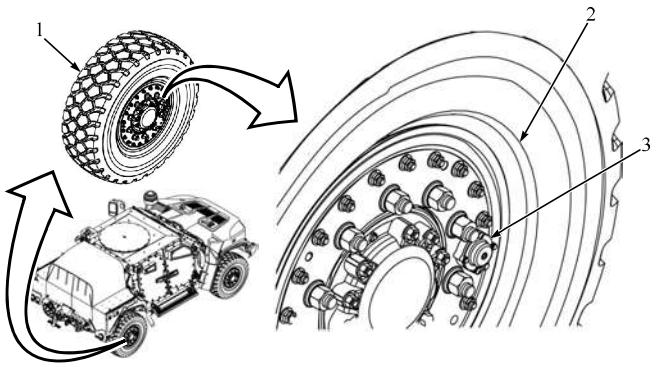


Figure 21. Wheel/Tire.

24	After	(Passenger Side Rear) Wheel Deflector and Belly Armor (if armor installed)	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect area between belly armor (Figure 22, Item 2) and propeller shaft to verify it is clear of debris.	Debris found contacting propeller shaft.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			2. Inspect wheel deflector (Figure 22, Item 1) for missing components and obvious damage.	Components missing or damaged.

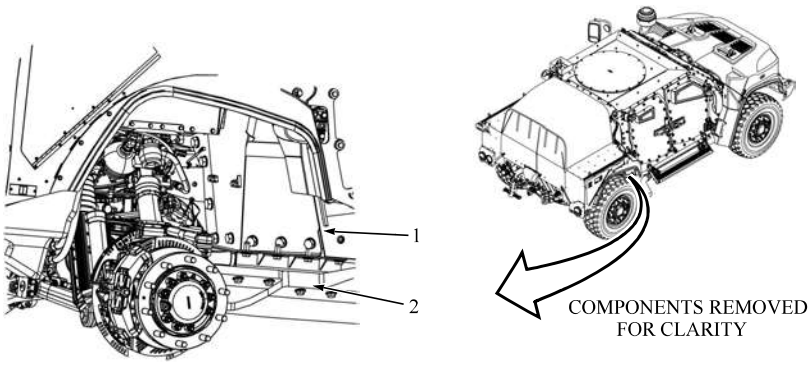


Figure 22. Passenger Side Belly Armor Inspection.

25	After	(Passenger Side Rear) Stowage Boxes	**NOTE** The following applies to A0 and A1 variants of M1278 and 1280 only. 1. Visually inspect stowage boxes for proper operation (WP 0029). **NOTE** The following applies to A0 and A1 variants of M1281 only. 2. Visually inspect stowage boxes for proper operation (WP 0031). **NOTE** The following applies to A0 and A1 variants of M1279 only. 3. Check stowage boxes for proper operation (WP 0030).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
26	After	(Passenger Side Rear) Fuel Cap and Strainer	**WARNING** Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Use a drain pan or suitable container to capture any draining, leaking or spilled fuel. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Immediately clean up spilled fuel. Keep cloths / rags away from open flame and / or ignition sources. Comply with local procedures and environmental regulations when disposing of unused fuel, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fuel. Failure to comply may result in injury to personnel and/or damage to the environment. 1. Check fuel cap (Figure 23, Item 1) for looseness, cracks, and obvious damage (WP 0037).	Fuel cap missing or damage which prevents proper operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

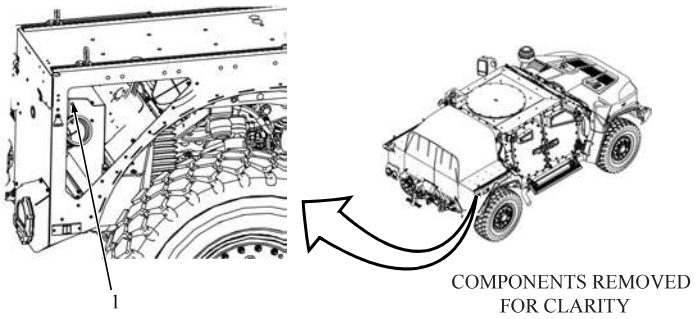


Figure 23. Fuel Cap.

			2. Remove fuel cap (WP 0037). 3. Inspect fuel strainer (Figure 24, Item 1) for debris and clean out as necessary.	

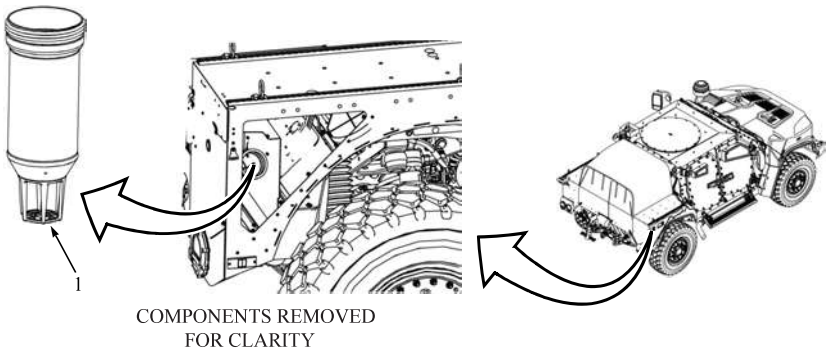


Figure 24. Fuel Strainer.

27	After	(Passenger Side Rear) Brake Reservoirs	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			NOTE Indicators on outside of reservoir. If necessary, bump reservoir to see fluid move. It is normal for brake fluid level to go down as brake pads wear. Brake fluid should not be replenished unless fluid level below LOW line or as required due to maintenance. Inspect two service brake reservoirs (Figure 25, Item 2) and one park brake reservoir (Figure 25, Item 1) for obvious damage and leaks. Ensure brake fluid is between FILL and LOW lines. If brake fluid is below LOW line, add brake fluid as necessary (WP 0174).	Any brake fluid leak present.

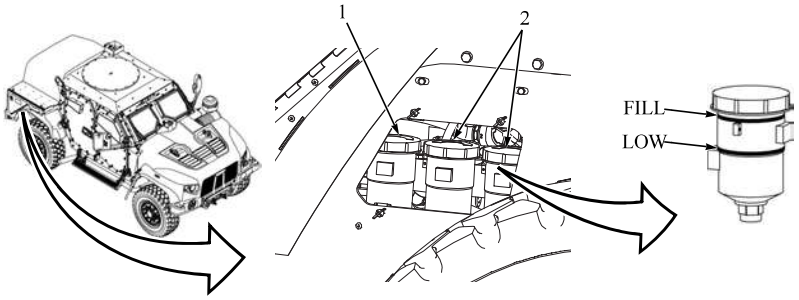
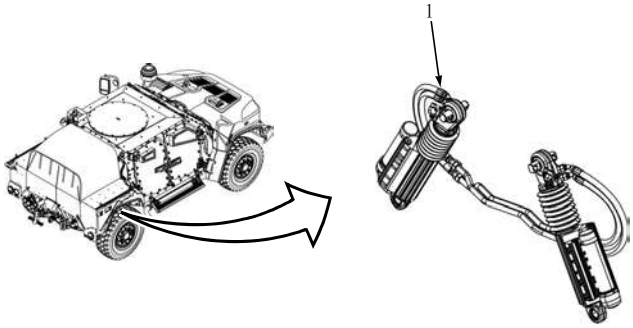


Figure 25. Passenger Side Rear Brake Reservoirs.

28	After	(Passenger Side Rear) Suspension Cross Plumbing Hoses	Inspect cross plumbing hoses (Figure 26, Item 1) for blisters, tears, and exposed metal braids.	Metal braids exposed or class III leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
 **Figure 26. Suspension Cross Plumbing Hoses.**				
29	After	(Passenger Side Rear) Jounce Bumper	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. Inspect jounce bumper (Figure 27, Item 1) for gouges, cracks, or if missing.	Jounce bumper missing or damage which prevents proper operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

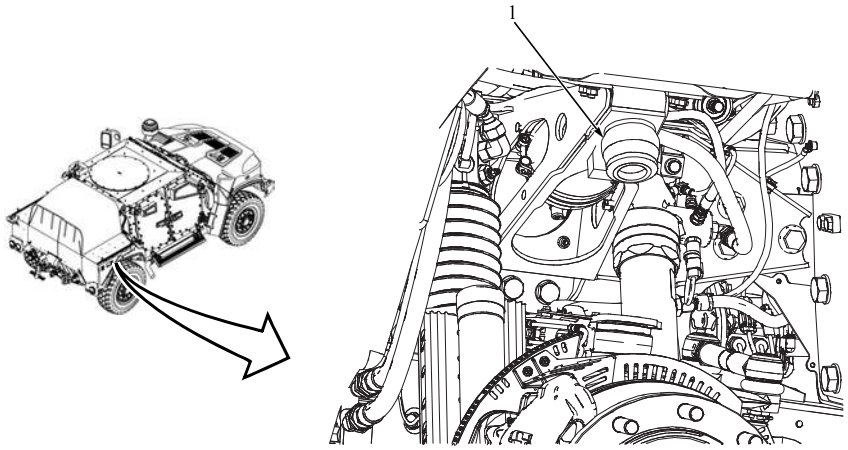


Figure 27. Jounce Bumper.

30	After	(Passenger Side Rear) Fluid Leaks	Inspect passenger side rear for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
31	After	(Passenger Side) Muffler	Inspect muffler (Figure 28, Item 3), clamps (Figure 28, Item 1), and pipes (Figure 28, Item 2) for looseness, leaks, or damage.	Damage that impedes operation.

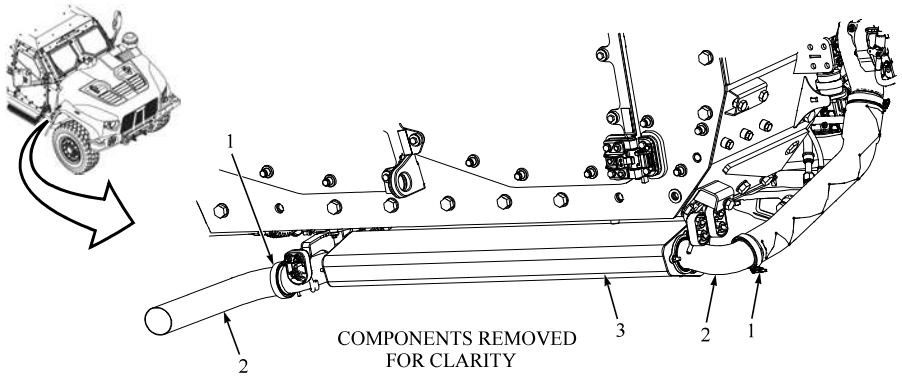


Figure 28. Muffler.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
32	After	(Passenger Side) Door Overlaps	Inspect door overlaps (Figure 29, Item 1) for obvious damage and loose hardware.	Door overlap missing, cracked, or damaged.

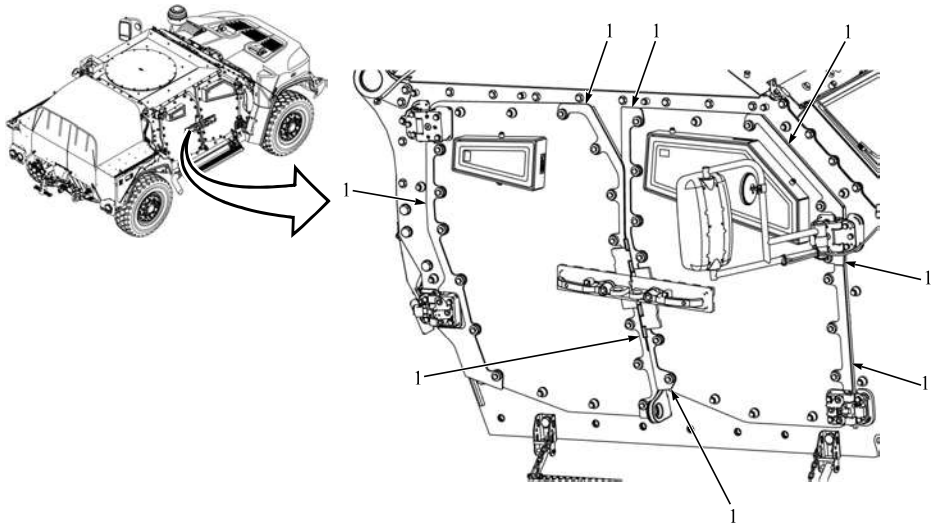


Figure 29. Door Overlaps.

33	After	(Passenger Side Front) Wheel/Tire	1. Inspect tire (Figure 30, Item 1) for flat conditions, for cuts, gouges, cracks, bulging or other damage, and inspect wheel (Figure 30, Item 2) for broken, cracked, or bent surfaces.	Tire has wear or damage that allows ply or belt material to be exposed through tread or sidewall. Tire has tread or sidewall separation. Tire has audible leak. Wheel damaged or cracked.
			2. Visually check if tire tread wear indicators are visible.	Tire tread depth is approaching tire wear bar.
			3. Inspect CTIS valve (Figure 30, Item 3) for leaks.	Air leak or damage to valve that

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				impairs vehicle operation.

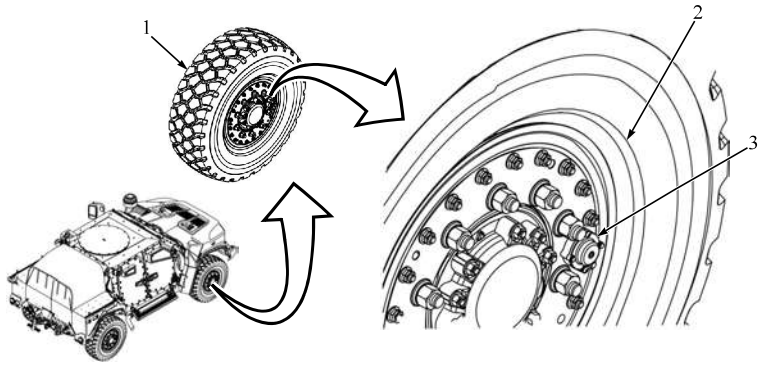
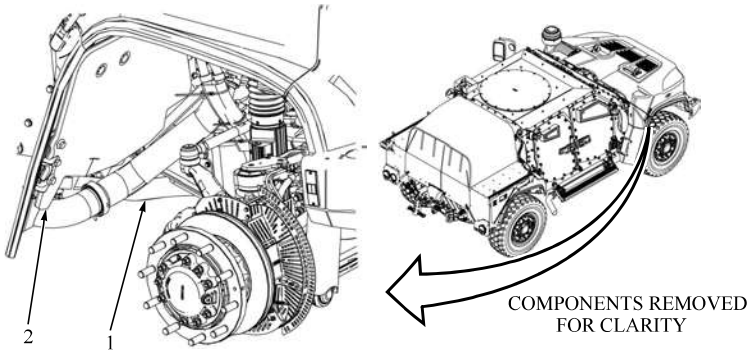
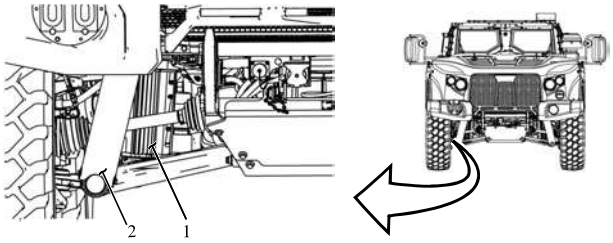
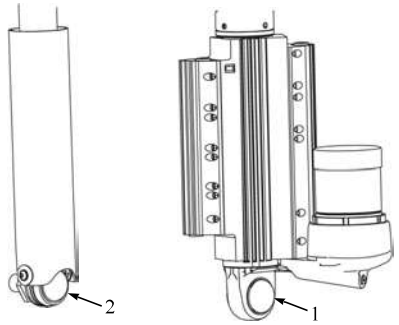
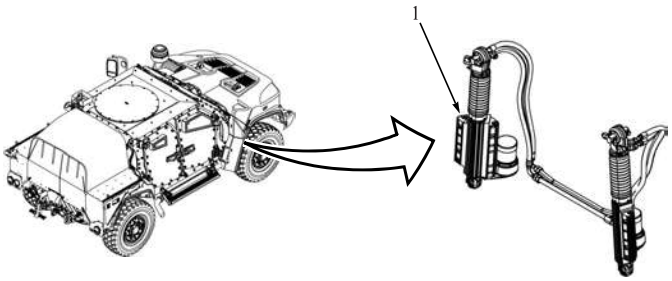


Figure 30. Wheel/Tire.

34	After	(Passenger Side Front) Wheel Deflector and Belly Armor (if armor installed)	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect wheel deflector (Figure 31, Item 2) for missing components and obvious damage. 2. Inspect area between belly armor (Figure 31, Item 1) and propeller shaft to verify it is clear of debris.	Components missing or damaged. Debris found contacting propeller shaft.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 31. Wheel Deflector and Belly Armor Inspection.**	
35	After	(Passenger Side Front) Suspension Inspections	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. **NOTE** Shock absorbers may have a thin film of oil on outer surface due to a normal condition known as "misting". Misting is not considered a leak and will not be evident as a stream of fluid. 1. Inspect springs (Figure 32, Item 2) for leaks and obvious damage. 2. Inspect shocks (Figure 32, Item 1) for leaks and obvious damage.	Any leak present or damage to spring which may impair vehicle operation. Class III leak present or damage to shock which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				
			Figure 32. Suspension Inspections.	
36	After	(Passenger Side Front) Shock Absorber and Spring Caps	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect shock absorber cap (Figure 33, Item 1) for cracks, tears, or if missing. 2. Inspect spring cap (Figure 33, Item 2) for cracks, tears, or if missing.	Shock absorber cap missing or damage which prevents proper operation. Spring cap missing or damage which prevents proper operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 33. Shock Absorber and Spring Caps.**	
37	After	(Passenger Side Front) Suspension Cross Plumbing Hoses	Inspect cross plumbing hoses (Figure 34, Item 1) for blisters, tears, and exposed metal braids.	Metal braids exposed or class III leak present.
			 **Figure 34. Suspension Cross Plumbing Hoses.**	
38	After	(Passenger Side Front) Fluid Leaks	Inspect passenger side front for obvious damage and evidence of leaks.	Any brake fluid, fuel, or Class III leak is present.
39	After	(Passenger Side Front) Jounce Bumper	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			Inspect jounce bumper (Figure 35, Item 1) for gouges, cracks, or if missing.	Jounce bumper missing or damage which prevents proper operation.

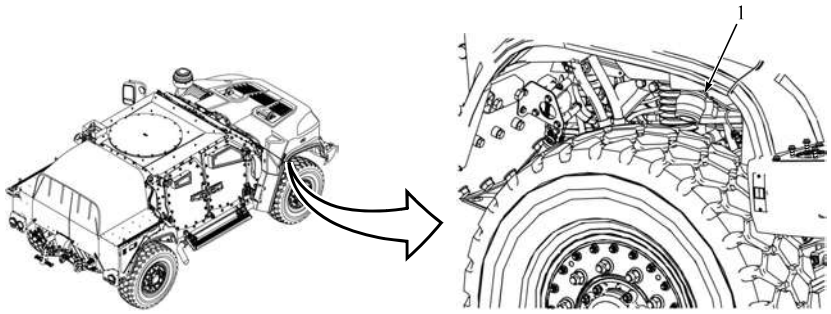


Figure 35. Jounce Bumper.

40	After	(Passenger Side Front) Splash Guard	Inspect splash guard (Figure 36, Item 1) for cracks and obvious damage.	

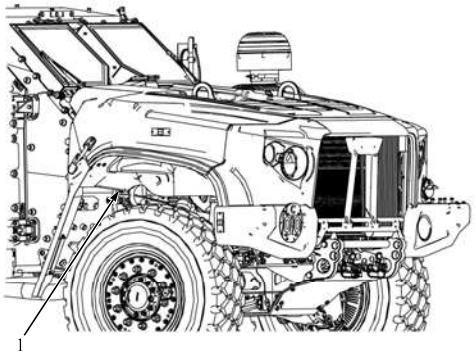


Figure 36. Splash Guard.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
41	After	(Passenger Side Front) Vehicle Checks	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. Inspect steering components (Figure 37, Item 5) for obvious damage, looseness, and leaks. 2. Inspect service and park brake hose protectors (Figure 37, Item 2) for excessive abrasion. 3. Inspect service and park brake hose fittings for leaks or damage. 4. Inspect halfshaft (Figure 37, Item 3), boots (Figure 37, Item 4), and ball joint boots (Figure 37, Item 1) for leaks, rips, tears, and obvious damage.	Damage which prevents proper operation. Halfshaft boots or ball joint boots torn or any damage that would impair vehicle operation.

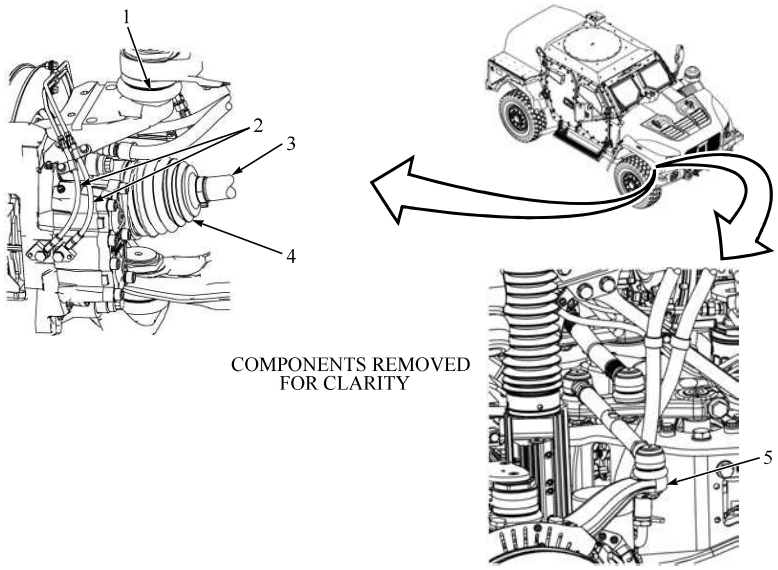


Figure 37. Passenger Side Vehicle Checks.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
42	After	(Front of Vehicle) Lights	1. Inspect marker lights (Figure 38, Item 3) for secure mounting, cracks, and obvious damage. 2. Inspect headlights (Figure 38, Item 1) for secure mounting, cracks, and obvious damage. 3. Inspect Black Out (B.O.) light (Figure 38, Item 4) for secure mounting, cracks, and obvious damage. 4. Inspect turn signal lights (Figure 38, Item 2) for secure mounting, cracks, and obvious damage.	

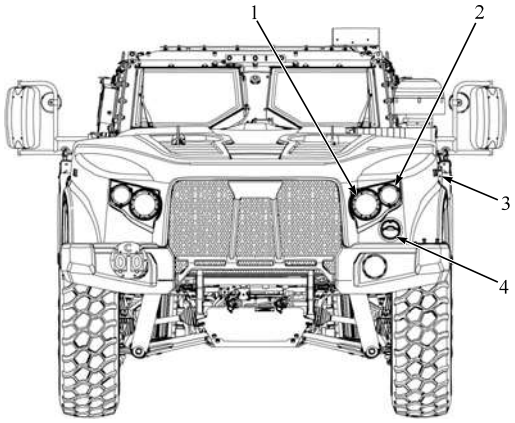
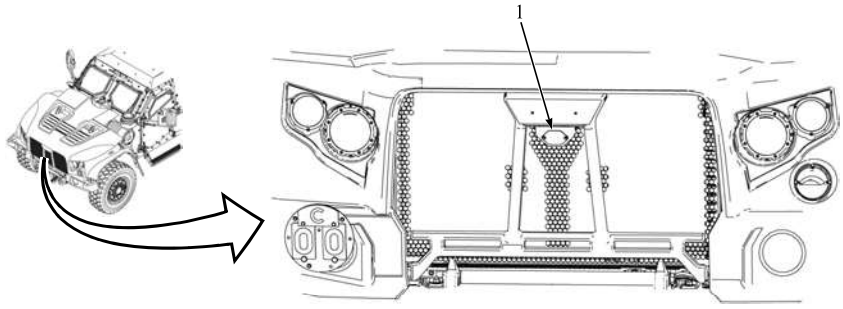
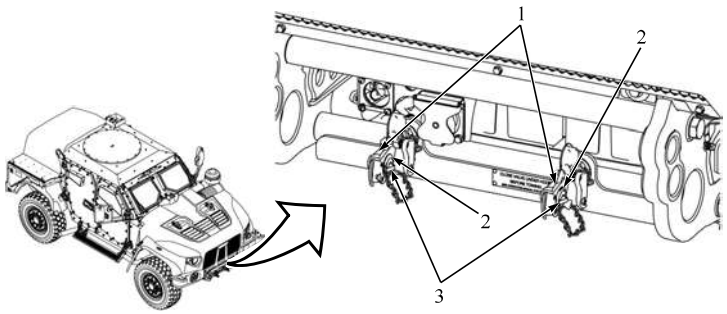
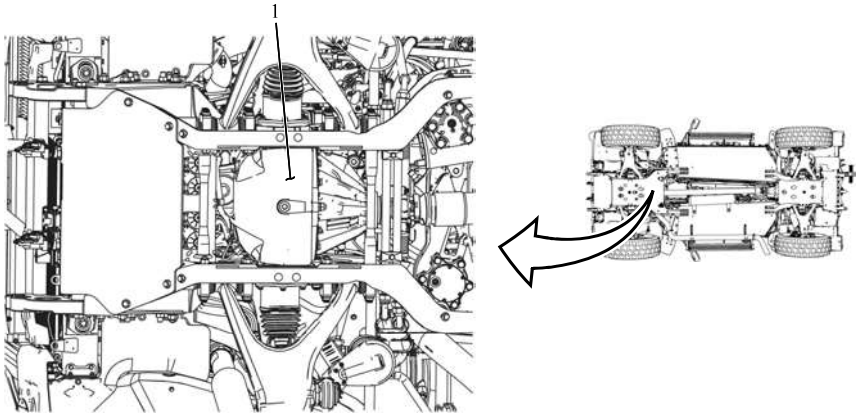


Figure 38. Lights.

43	After	(Front of Vehicle) Front Facing Camera Lens	Inspect for broken, scratched, or dirty camera lens glass (Figure 39, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 39. Front Facing Camera Lens.**	
44	After	(Front of Vehicle) Gladhands	Inspect front gladhand couplers (Figure 40, Item 1) and grommets (Figure 40, Item 2) for leaks, damage, or missing gladhand plugs (Figure 40, Item 3).	
			 **Figure 40. Gladhands.**	
45	After	(Under-body) Front Differential	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. Inspect front differential (Figure 41, Item 1) for leaks and obvious damage.	Any class III leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 41. Front Differential.**	
46	After	(Underbody) Under Vehicle Checks	**WARNING** Use a drain pan or suitable container to capture any draining leaking or spilled oil. Refer to local procedures and plans for preventing and responding to oil spills or leaks. Immediately clean up spilled oil. Comply with local procedures and environmental regulations when disposing of unused oil, soiled/cleanup materials (such as filters and rags), and drained, leaked, or spilled oil. Failure to comply may result in injury to personnel and/or damage to the environment. Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			CAUTION Area around rotating parts, such as propeller shafts, halfshafts, and steering components, need to be cleared of any excessive buildup of mud, sand, or snow as soon as possible. Failure to comply may result in damage to equipment.	
			1. Inspect under vehicle for obvious damage and evidence of leaks.	Brake fluid, fuel leak, or any class III leak present.
			2. Inspect transmission (Figure 42, Item 4), air lines (Figure 42, Item 5), tubes (Figure 42, Item 3), and fittings (Figure 42, Item 2) for leaks.	Any air leak present.
			3. Inspect upper propeller shaft (Figure 42, Item 1) and lower propeller shaft (Figure 42, Item 6) for damage.	If upper or lower propeller shaft has bends, cracks, or grooves beyond paint coat.

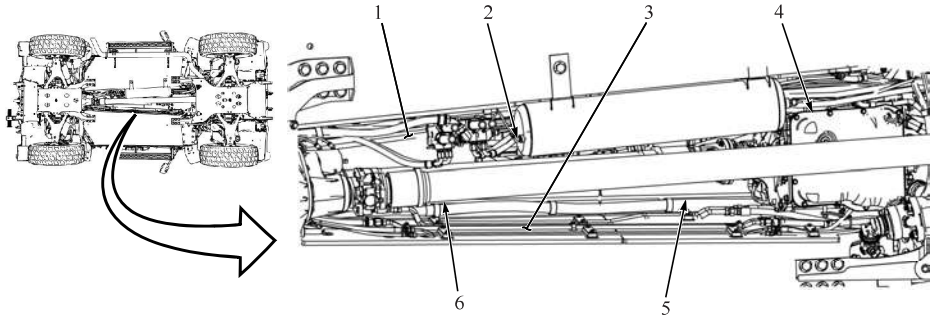


Figure 42. Under Vehicle Checks.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
47	After	(Under-body) Transaxle	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. Inspect transaxle (Figure 43, Item 1) for leaks and obvious damage.	Any class III leak present.

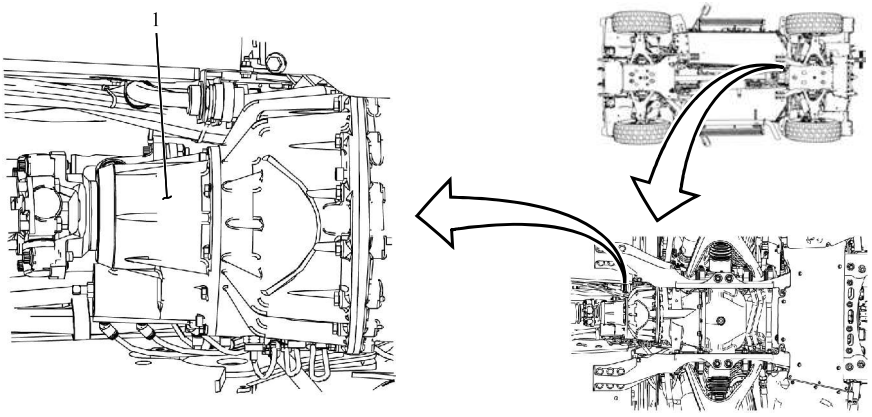
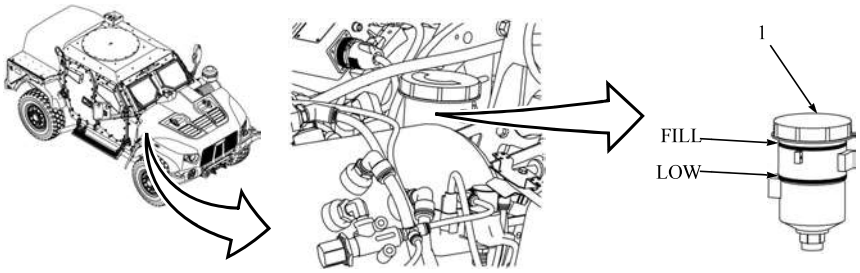


Figure 43. Transaxle.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
48	After	(Engine Compart-ment) Pas-senger Side Front Brake Res-ervoir	**NOTE** Indicators are located on outside of reservoir. If necessary, bump reservoir to see fluid move. It is normal for brake fluid level to go down as brake pads wear. Brake fluid should not be replenished unless fluid level below LOW line or as required due to maintenance. Inspect brake reservoir (Figure 44, Item 1) for obvious damage, leaks, and to ensure brake fluid is be-tween FILL and LOW lines. If brake flu-id is below LOW line, add brake fluid as necessary (WP 0174).	Any brake fluid leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
 **Figure 44. Passenger Side Front Brake Reservoir.**				
49	After	(Engine Compartment) Cooling System	**WARNING** If engine has been recently operated, then cooling system is hot and pressurized. Allow system to cool prior to cleaning. Failure to comply may result in injury or death to personnel. **CAUTION** Use care when cleaning radiator fins, charge air cooler fins, A/C condenser fins, and transmission oil cooler fins to prevent bending fins. Failure to comply may result in damage to equipment. Inspect radiator (Figure 45, Item 2), transmission oil cooler (Figure 45, Item 1), clamps, tubes, and hoses for leaks, cuts, loose hose clamps, debris, buildup, and other obvious damage.	Any class III leak present or damage which prevents proper operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

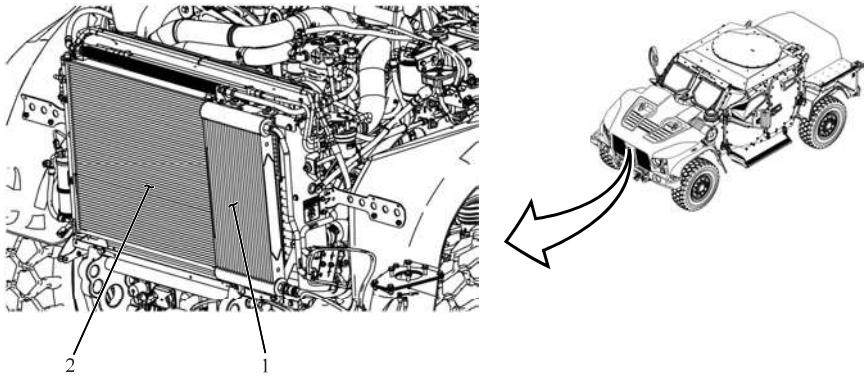


Figure 45. Cooling System.

50	After	(Engine Compartment) Engine Compartment	1. Inspect that belts (Figure 46, Item 1) are present and check for cracking, fraying, glazing, and other damage.	Drive belts are cracked, frayed, glazed, missing, or damaged.

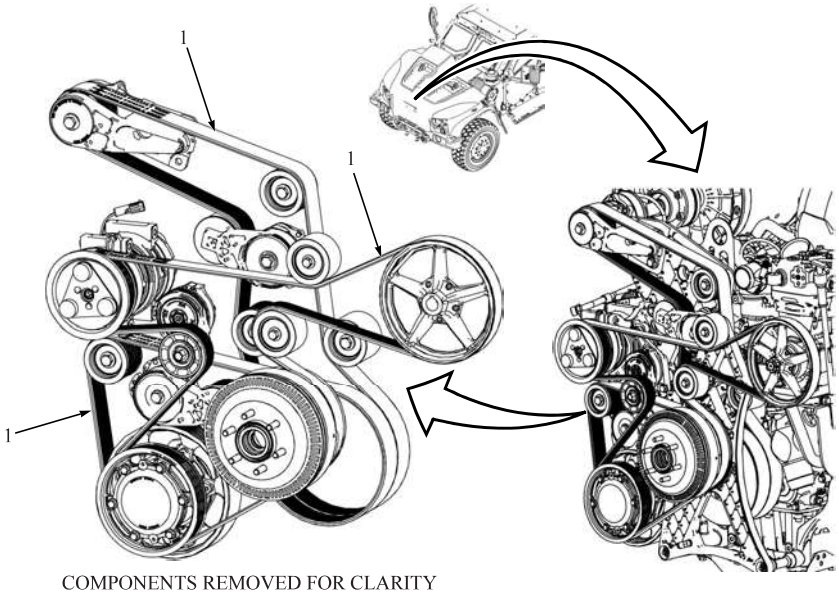


Figure 46. Drive Belts.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			2. Inspect engine compartment (Figure 47, Item 1) for obvious damage.	
			3. Inspect air compressor (Figure 47, Item 3) for leaks and obvious damage.	Any class III present.
			4. Inspect fuel filter (Figure 47, Item 2), fuel lines, and fuel hoses for leaks, looseness, and obvious damage.	Any fuel leak present.

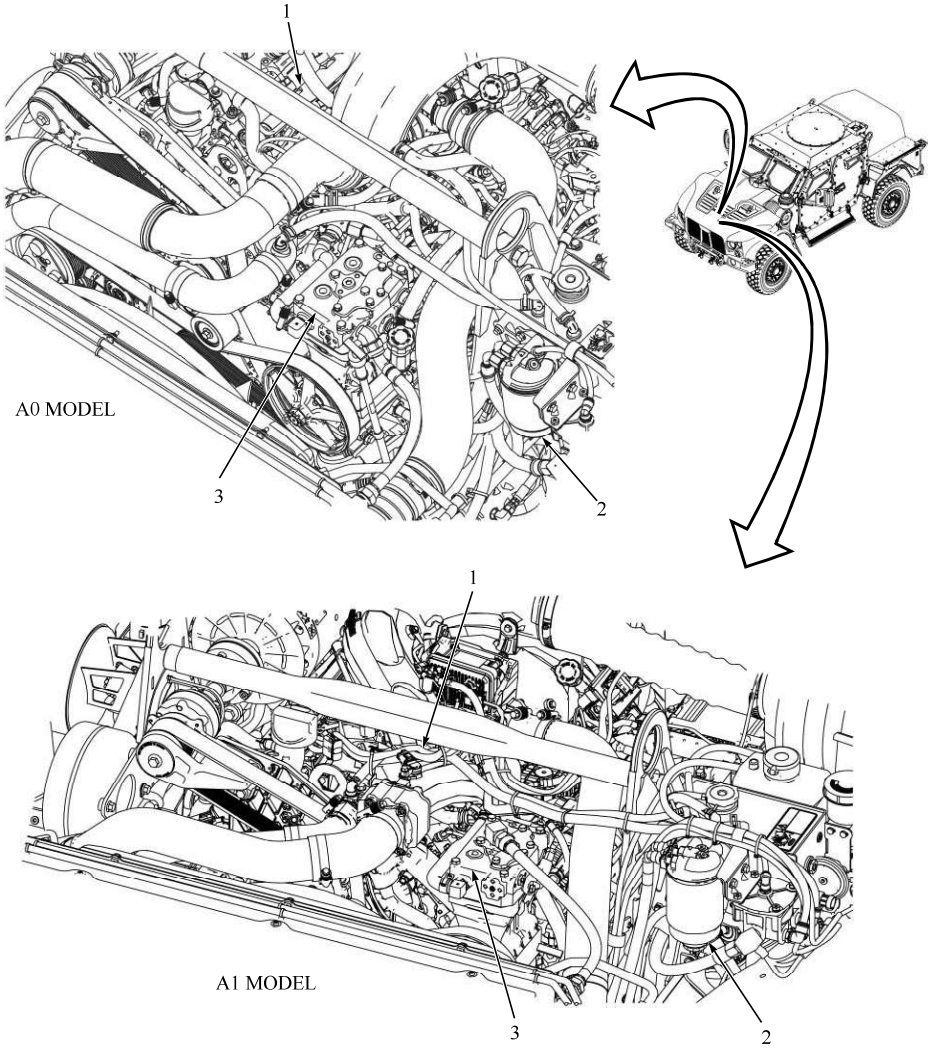


Figure 47. Engine Compartment.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
51	After	(Engine Compartment) Engine Oil	1. Remove dipstick (Figure 48, Item 1) from dipstick tube (Figure 48, Item 3) and check for milky colored oil and if oil has a fuel smell. 2. Check oil level is between ADD and FULL marks (Figure 48, Item 2). If level below ADD, add oil to bring level between ADD and FULL marks (WP 0174).	Oil is milky colored or smells like fuel. Oil level overfull.

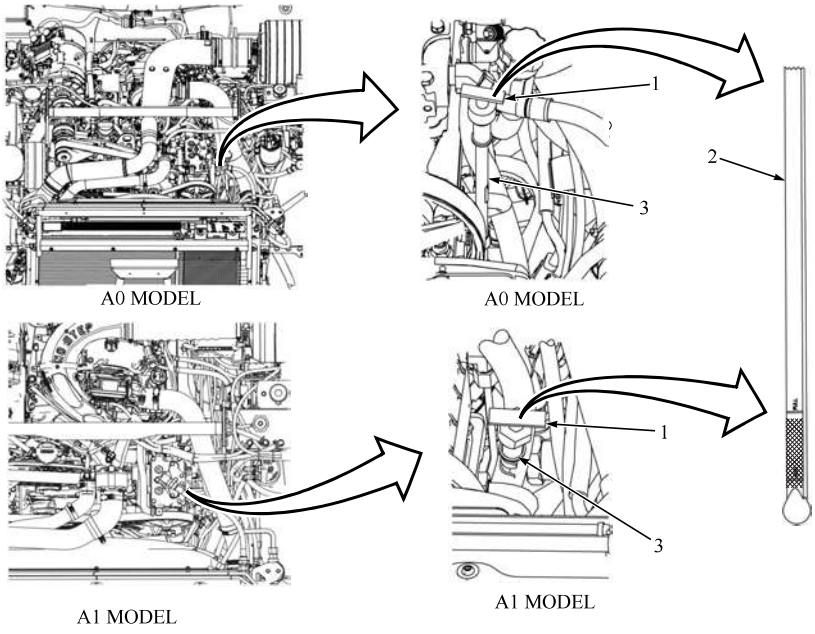


Figure 48. Engine Oil.

52	After	(Engine Compartment) Driver Side Brake Reservoir	**NOTE** Indicators on outside of reservoir. If necessary, bump reservoir to see fluid move. It is normal for brake fluid level to go down as brake pads wear. Brake fluid should not be replenished unless fluid level below LOW line or as required due to maintenance. Inspect brake reservoir (Figure 49, Item 1) for obvious damage, leaks, and to ensure brake fluid between FILL and LOW lines. If brake flu-	Any brake fluid leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			id is below LOW line, add brake fluid as necessary (WP 0174).	

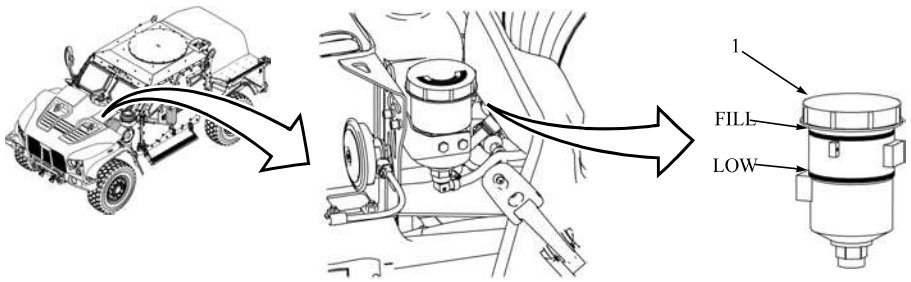


Figure 49. Driver Side Brake Reservoir.

53	After	(Engine Compartment) Transmission Fluid	**WARNING** Severe burns may result from engine components becoming hot during normal operation. If possible, allow engine components to cool prior to servicing. Do not touch hot engine components with bare hands or allow body to contact hot engine components. Failure to comply may result in injury to personnel. Rotating parts can cause injury to personnel. Keep hands and clothing clear of moving parts in engine compartment. Ensure that all guards are in place and do not wear loose clothing when performing maintenance. Always check to ensure that area is clear of personnel and obstructions before starting engine. Failure to comply may result in injury or death to personnel. **CAUTION** An accurate fluid level check is possible only if engine is idling (750 to 950 RPM) in N (neutral), transmission fluid temperature is between 100 and 200 °F (38 and 93 °C), and vehicle is on a level surface. Failure to comply may result in damage to equipment.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			1. Ensure vehicle is parked (WP 0045) on a level surface, parking brake is applied, transmission temperature is between 100 and 200 °F (38 and 93 °C), and hood is open (WP 0041). 2. If not running, start and idle engine (WP 0054) with transmission in N (neutral) for 1 minute. 3. With parking brake engaged and service brake applied, shift transmission range selector (WP 0061) to D, 3, 2, 1, and then to R to clear hydraulic circuits of air. Shift selector to N (neutral) and leave engine at idle. **CAUTION** Do not permit dirt, dust, or grit to enter transmission filler tube. Thoroughly clean dipstick handle and end of filler tube. Serious internal transmission damage can result if transmission fluid is contaminated. Failure to comply may result in damage to equipment. If transmission fluid is too high and needs to be drained, notify Field Maintenance. Failure to comply may result in damage to equipment. **NOTE** Be sure fluid level checks are consistent. Check level more than once. When readings are not consistent, notify Field Maintenance. 4. Remove transmission dipstick (Figure 50, Item 1). 5. After wiping transmission dipstick (Figure 50, Item 1) clean, install dipstick into tube completely and then remove dipstick (Figure 50, Item 1) to check fluid level. If fluid on dipstick (Figure 50, Item 1) is within HOT band, level is satisfactory. If fluid level is not within this band, adjust fluid as necessary to bring level within HOT band. Refer to Lubrication	Transmission range selector binds or will not engage all gears. Transmission fluid level not within HOT band. Any Class III leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			Instructions if low (WP 0174). Notify Field Maintenance if high. 6. Install dipstick (Figure 50, Item 1). 7. Shut engine OFF (WP 0054).	

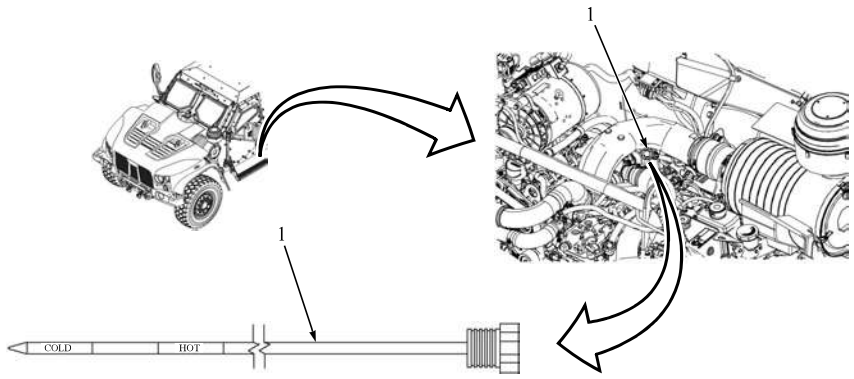


Figure 50. Transmission Dipstick.

54	After	(Engine Compartment) Hydraulic Reservoir	1. Inspect hydraulic reservoir (Figure 51, Item 3), hoses, lines, and fittings for cracks, leaks, and obvious damage. 2. Inspect hydraulic fill port (Figure 51, Item 2) for cracks, leaks, missing cap (Figure 51, Item 1), and obvious damage.	Any class III leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

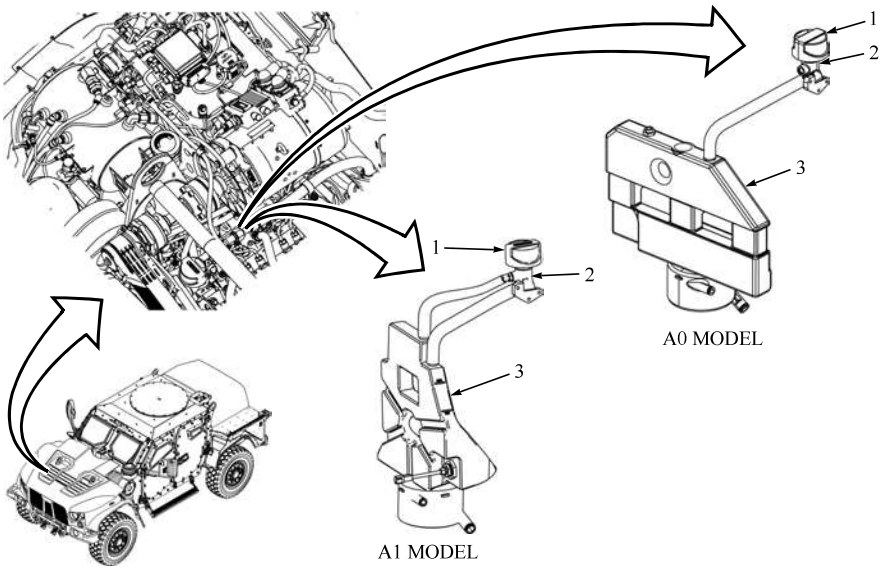


Figure 51. Hydraulic Reservoir.

55	After	(Engine Compartment) Windshield Washer Reservoir	Inspect windshield washer reservoir (Figure 52, Item 1) for missing components, fluid level, leaks, and obvious damage.	

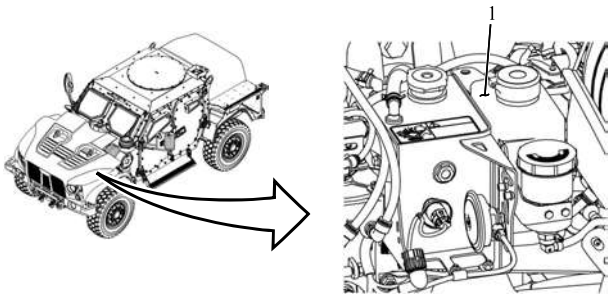


Figure 52. Windshield Washer Reservoir.

56	After	(Crew Compartment) Active Faults	1. Check SERVICE SELECTION screen (WP 0034) on DSDU for active codes and report active codes to Field Maintenance as necessary.	DSDU does not power on or operate.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			2. Check FLUID LEVELS screen (WP 0034) on DSDU for low hydraulic fluid, engine oil, coolant, front and rear axle oil, and fuel. If LOW, add appropriate fluid (WP 0174) until level reads OK on screen or notify Field Maintenance as necessary.	
			3. Check for illuminated fault indicators on main instrument panel (WP 0013).	Any warning indicator illuminated red or amber.
57	After	(Crew Compartment) Driver and Passenger Side Mirrors, Doors, Ballistic Glass, and Windshield Wipers	**NOTE** Driver side and passenger side mirrors, doors, and ballistic glass are inspected the same way.	
			1. Check mirrors for improper operation and damage (WP 0051).	Any mirror missing, unusable, or cracks that impair driver vision.
			2. Check front and rear doors, door latches, and combat locks for improper operation, binding, and damage (WP 0028).	Damage which prevents proper operation.
			3. Check central region of front and rear door ballistic glass (Figure 53, Item 1) for delamination of inner layers or broken exterior glass exposing inner glass.	Ballistic glass delamination sufficiently impairs operator's vision or cracked, broken, damaged.Scratches which completely impair visibility or large, deep through-thickness cracks.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

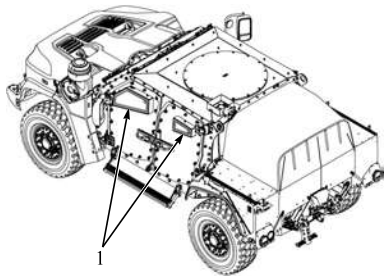


Figure 53. Mirrors, Doors, and Windows.

			4. Inspect driver and passenger windshield ballistic glass (Figure 54, Item 1) for delamination of inner layers, broken exterior glass exposing inner glass, excessive scratches which completely impair visibility, or large, deep through-thickness cracks. 5. Inspect windshield wiper arms (Figure 54, Item 3) and blades (Figure 54, Item 2) for damage, cracks, tears, or if missing.	Ballistic glass cracked or broken. Poor visibility due to scratches. Ballistic glass with inner delamination.

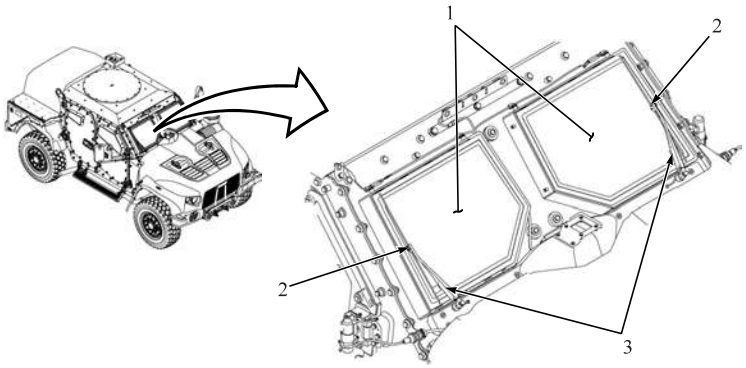


Figure 54. Windshield and Wipers.

			6. Check windshield washer control and windshield wiper control for proper operation (WP 0063). 7. Shut engine OFF (WP 0054).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
58	After	(Crew Compartment) Egress Hatch Inspection	Inspect egress hatch operates properly.	Hatch does not operate properly unless operation is restricted by an installed shelter.

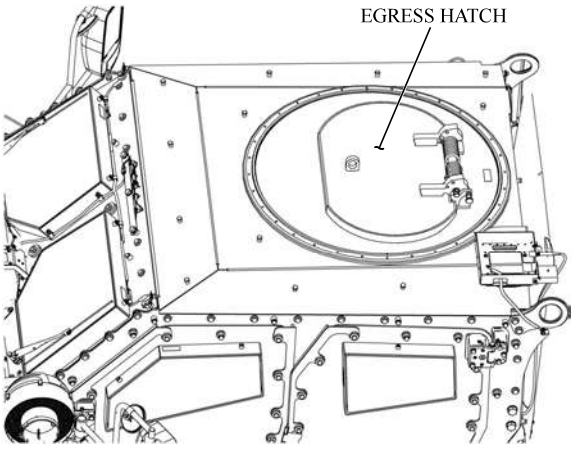
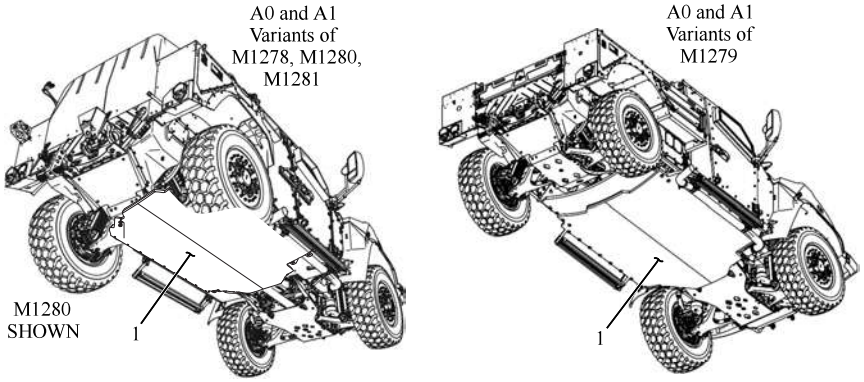
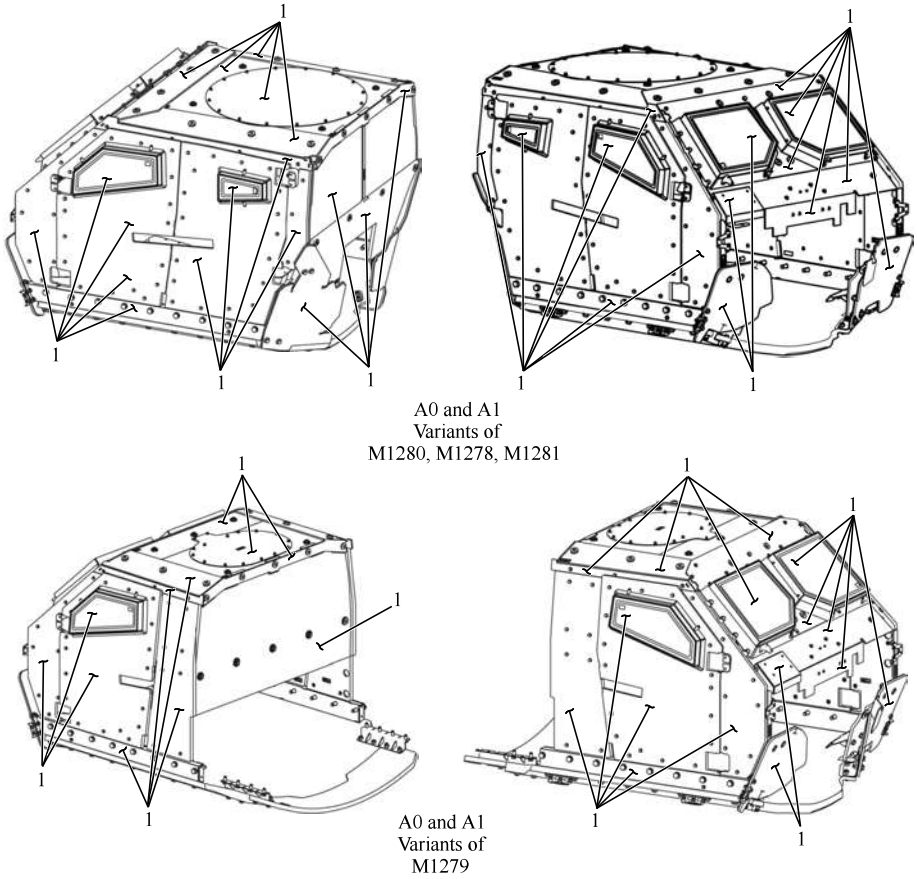


Figure 55. Egress Hatch.

59	After	(Armor) B-Kit Armor	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. If installed, inspect B-Kit belly armor (Figure 56, Item 1) for loose or missing hardware, improper alignment, cracks, and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 56. B-Kit Armor.**	
			2. If installed, inspect B-Kit armor (Figure 57, Item 1) for loose or missing hardware, improper alignment, cracks, and obvious damage.	Any armor panel missing or damaged which impairs blast protection.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 57. B-Kit Armor.**	
60	After	(Armor) Rocket Propelled Grenade (RPG) Frames	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Seek immediate medical attention if injury occurs. 1. If installed, inspect RPG frames (Figure 58, Item 1) for obvious damage. 2. Inspect door release cables (Figure 58, Item 2) for smooth operation and return to neutral	Any frames missing or torn.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			position when released. Clean as necessary by wiping with damp cloth, and/or rinsing with water.	

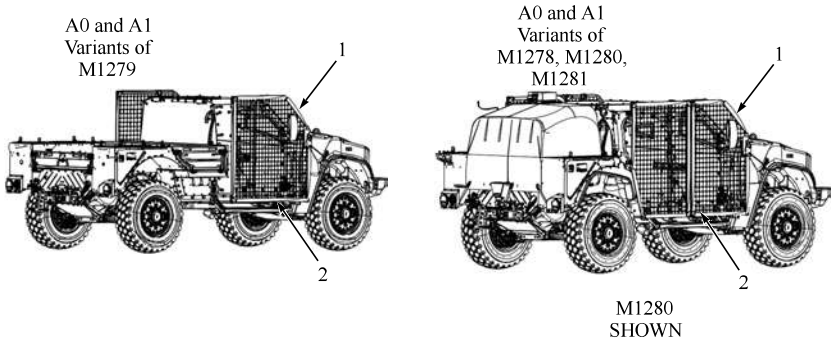


Figure 58. RPG Frames.

61	After	(Rear of Vehicle) Drain Air	Drain air system (WP 0156).	

END OF WORK PACKAGE

OPERATOR MAINTENANCE
PREVENTIVE MAINTENANCE CHECKS AND SERVICES (PMCS) - MONTHLY

INITIAL SETUP:

Tools

Handle, Socket Wrench 1/2 in. Drive (WP 0176, Item 25)
Socket, 18MM X .50 in. Drive (WP 0176, Item 59)

Materials/Parts

Gloves, Leather (WP 0178, Item 16)

Personnel Required

Crew Member - 2

References

WP 0041
WP 0043
WP 0049
WP 0054
WP 0060
WP 0076
WP 0086
WP 0087
WP 0152
WP 0156
WP 0158
WP 0163
WP 0164
WP 0165

Equipment Condition

Suspension lock-out braces installed (WP 0167)

Table 1. Preventive Maintenance Checks and Services (PMCS) - Monthly

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

WARNING

Fuel is flammable and harmful to health. Keep fuel away from heat or ignition sources. DO NOT smoke within 50 feet (15 m) of a fuel source. Do not work on fuel system when engine is hot. Shut down engine before refueling. Ensure fuel nozzle is grounded to filler neck. Do not overfill fuel tank. Keep fire extinguisher nearby. Wear gloves and eye protection and ensure adequate ventilation during refueling. Refer to local procedures and plans for preventing and responding to fuel spills or leaks.

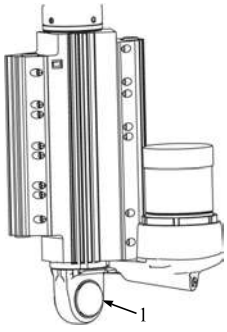
Lubricating Oil may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with lubricating oil may cause a skin rash. Wear protective eyewear, gloves and clothing. Remove saturated clothing immediately and thoroughly wash skin that comes in contact with lubricating oil. If exposed, flush skin and/or eyes with water and seek medical attention.

Engine coolant is poisonous if ingested and can irritate skin and eyes. Avoid skin and eye contact. Wear protective eyewear and clothing. If exposed, flush skin and/or eyes with water and seek medical attention.

Use a drain pan or suitable container to capture any draining, leaking or spilled fluid. Refer to local procedures and plans for preventing and responding to fluid spills or leaks. Immediately clean up spilled fluid. Comply with local procedures and environmental regulations when disposing of unused chemicals, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fluids. Failure to comply may result in injury to personnel, damage to equipment and/or damage to the environment.

Hydraulic systems operate at high pressures and temperatures. Hydraulic fluid under pressure can pierce the skin. Do not check for leaks with your hand. Always allow hydraulic oil to cool and relieve pressure in hydraulic system before conducting tasks. Open lines and hoses slowly and wait for any residual pressure to relieve before continuing to open lines and hoses. Hydraulic fluid may be flammable. Keep away from heat, open flame and/or other ignition sources. Prolonged contact with hydraulic fluid may cause skin irritation. Wear protective eyewear, gloves and clothing. If exposed, flush skin and/or eyes with water and seek medical attention.

Refrigerant R134a is a health hazard and may cause frostbite. Ensure that refrigerant is used in a well-ventilated area. Wear gloves, safety glasses, and clothing that covers legs and arms when working with refrigerant. If contact with skin occurs, wash the affected area with soap and water. If eye contact occurs, flush with water and seek medical attention immediately. Federal and state laws require that refrigerant be recovered and recycled. Refrigerant must be recovered from the system before performing any work. Only certified personnel, proper equipment, and approved refrigerant are to be used to recover, repair, and pressurize the system. Failure to comply may result in injury to personnel and/or damage to the environment.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
1	Monthly	(Driver Side Front) Suspension System	**WARNING** Use a drain pan or suitable container to capture any draining leaking or spilled oil. Refer to local procedures and plans for preventing and responding to oil spills or leaks. Immediately clean up spilled oil. Comply with local procedures and environmental regulations when disposing of unused oil, soiled/ cleanup materials (such as filters and rags), and drained, leaked, or spilled oil. Failure to comply may result in injury to personnel and/or damage to the environment. **NOTE** Shock absorbers may have a thin film of oil on outer surface due to a normal condition known as "misting". Misting is not considered a leak and will not be evident as a stream fluid. Inspect shock absorbers and accumulators (Figure 1, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.
				
			Figure 1. Suspension System.	
2	Monthly	(Driver Side Front) Air Cleaner	**CAUTION** Do not clean air filter with compressed air. Failure to comply may result in damage to equipment.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			Inspect air cleaner (Figure 2, Item 1) for cleanliness (WP 0152).	Filter element damaged or torn.

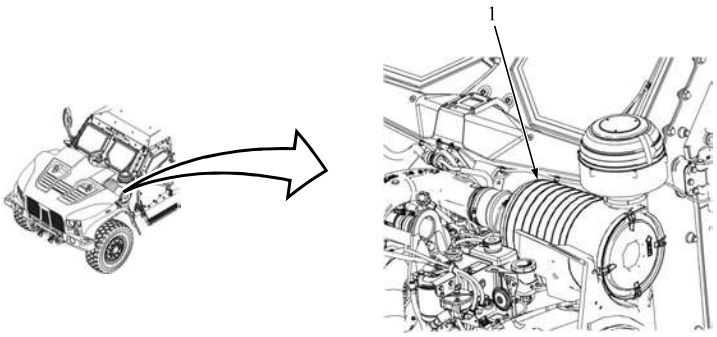


Figure 2. Air Cleaner.

3	Monthly	(Driver Side Front) Wheel/Tire	Inspect wheel lug nuts (Figure 3, Item 1) and studs (Figure 3, Item 2) for looseness and obvious damage.	One or more wheel nuts and/or wheel studs missing, loose, or damaged.

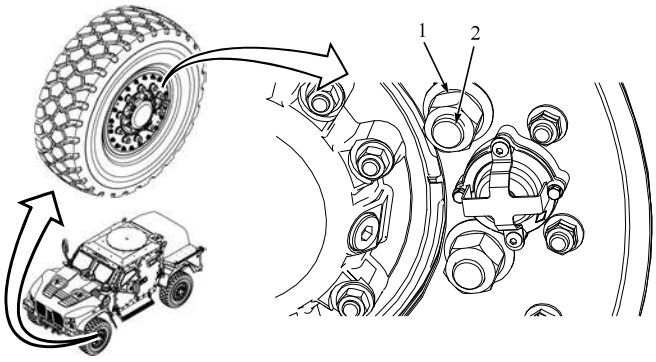


Figure 3. Wheel/Tire.

4	Monthly	(Driver Side Front) Wheel Hub	Inspect wheel hub (Figure 4, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

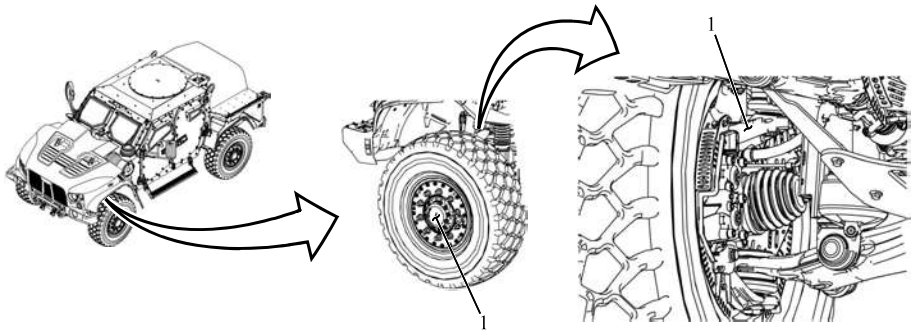


Figure 4. Wheel Hub.

5	Monthly	(Driver Side) Step Assembly	Inspect step (Figure 5, Item 2) and step linkage (Figure 5, Item 1) for cracks, damage, and missing hardware.	

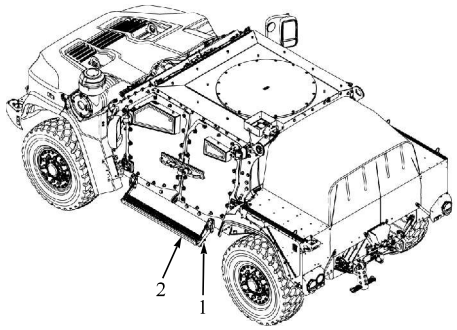
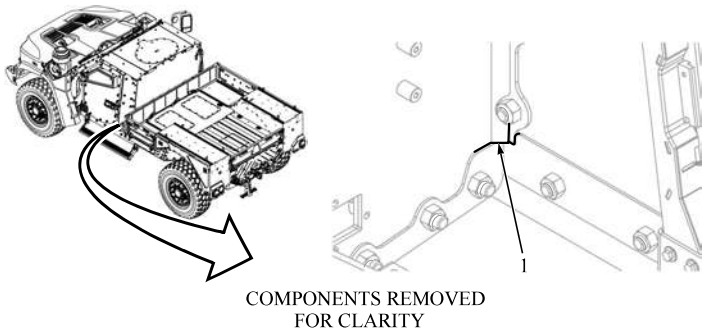


Figure 5. Step Assembly.

6	Monthly	(Driver Side) Cab Seams	Inspect sealing compound on rear cab floor seams (Figure 6, Item 1) for cracks, gaps, and any other visually apparent damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 6. Driver Side Cab Seams.**	
7	Monthly	(Driver Side) Electronics Box Filter and Covers	**NOTE** The following applies to A0 and A1 variants of M1279 only. 1. Inspect for debris on electronics box filters (WP 0165). **CAUTION** Do not ford vehicle more than 30 in. (762 mm) if seals on filter covers are damaged or missing. Failure to comply may result in damage to equipment. 2. Inspect seals (Figure 7, Item 2) on two electronic box filter covers (Figure 7, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

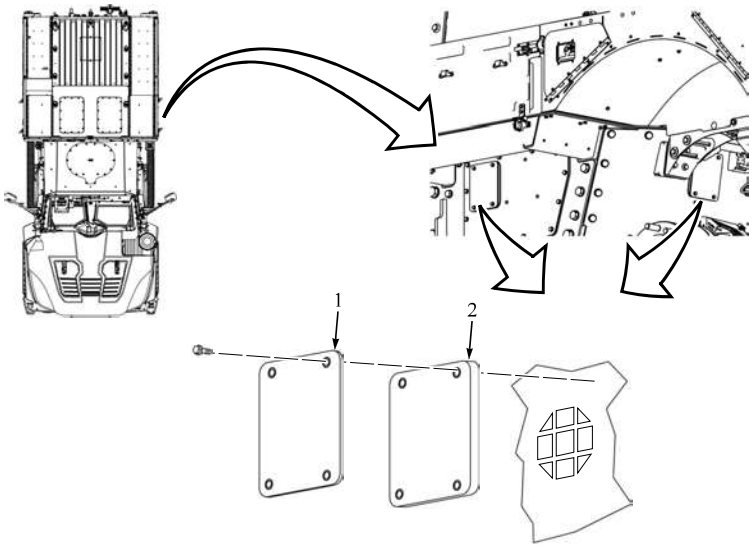


Figure 7. Electronics Box Filter and Covers.

8	Monthly	(Driver Side) Compartment Seams	Inspect sealing compound on all compartment seams (Figure 8, Item 1) for cracks, gaps, and any other visually apparent damage.	

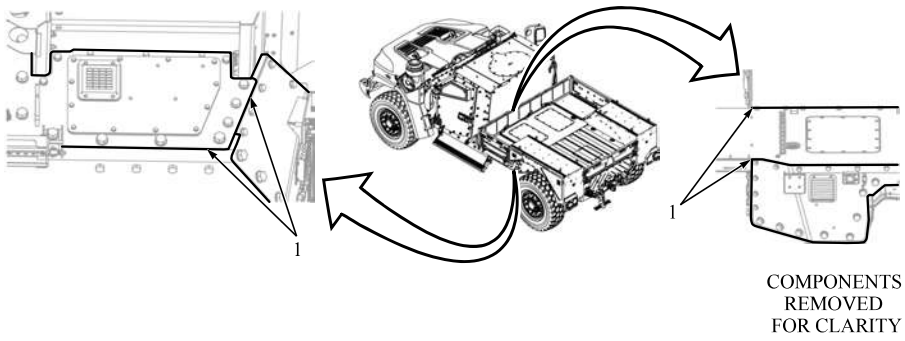


Figure 8. Compartment Seams.

9	Monthly	(Driver Side) Electrical Pass-Thrus	Inspect sealing compound on four electrical pass-thrus (Figure 9, Item 1) for cracks, gaps, and any other visually apparent damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

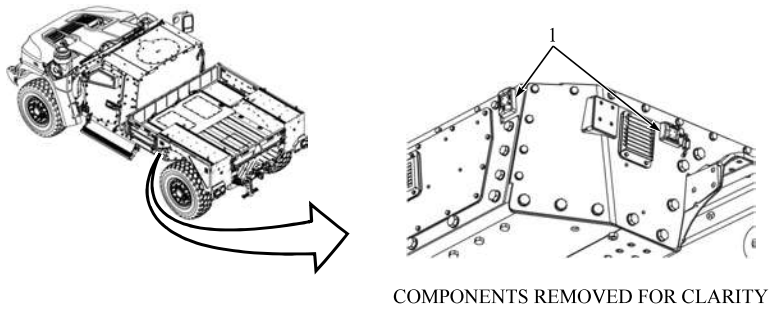


Figure 9. Electrical Pass-Thrus.

10	Monthly	(Driver Side) Electronic Box Drain Hole	Inspect drain hole (Figure 10, Item 1) for debris.	

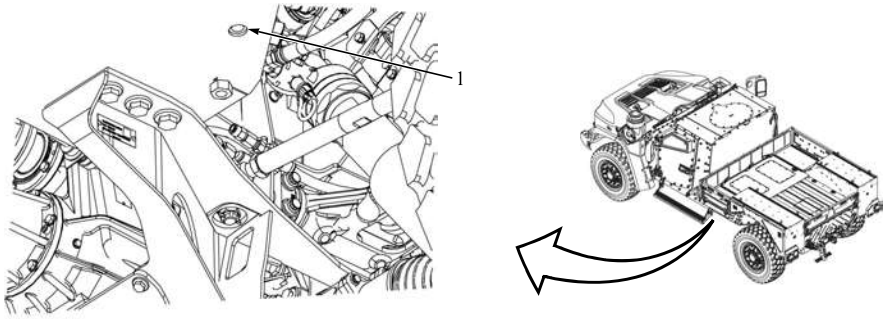
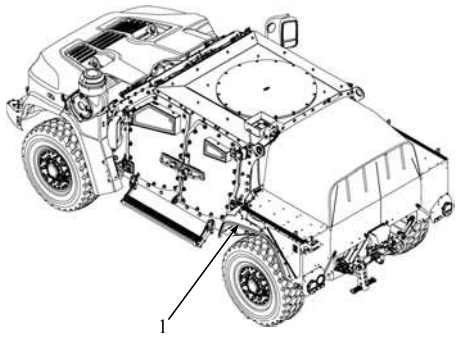


Figure 10. Electronic Box Drain Hole.

11	Monthly	(Driver Side Rear) Fender	**NOTE** The following applies to A0 and A1 variants of M1278, M1280, and M1281 only. Visually inspect rear fender (Figure 11, Item 1) and attaching hardware for cracks, corrosion, and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 11. Fender.**	
12	Monthly	(Driver Side Rear) Suspension System	**WARNING** Use a drain pan or suitable container to capture any draining leaking or spilled oil. Refer to local procedures and plans for preventing and responding to oil spills or leaks. Immediately clean up spilled oil. Comply with local procedures and environmental regulations when disposing of unused oil, soiled/cleanup materials (such as filters and rags), and drained, leaked, or spilled oil. Failure to comply may result in injury to personnel and/or damage to the environment. **NOTE** Shock absorbers may have a thin film of oil on outer surface due to a normal condition known as "misting". Misting is not considered a leak and will not be evident as a stream fluid. Inspect shock absorbers and accumulators (Figure 12, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

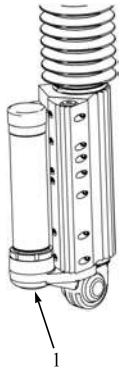


Figure 12. Suspension System.

13	Monthly	(Driver Side Rear) Wheel/Tire	Inspect wheel lug nuts (Figure 13, Item 1) and studs (Figure 13, Item 2) for looseness and obvious damage.	One or more wheel nuts and/or wheel studs missing, loose, or damaged.

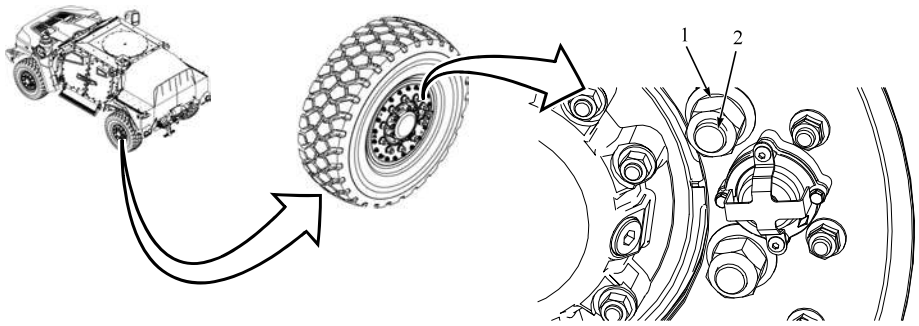
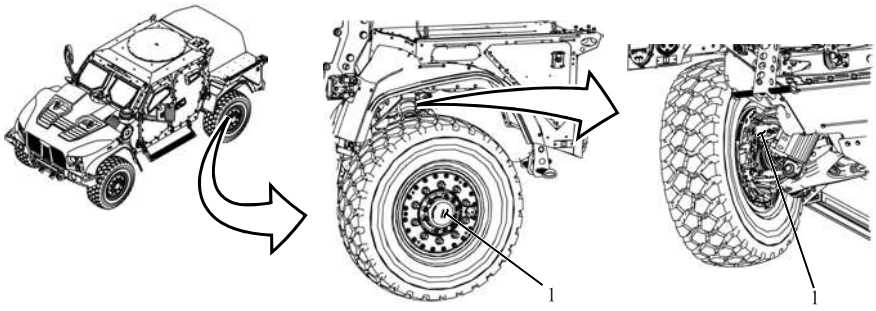
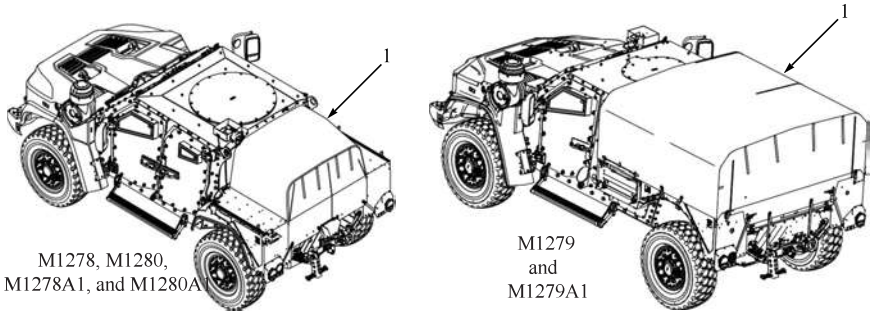
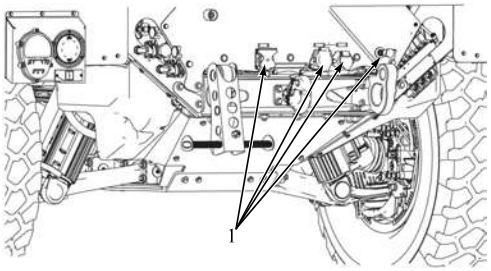
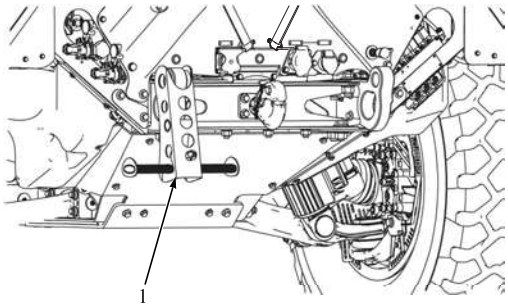
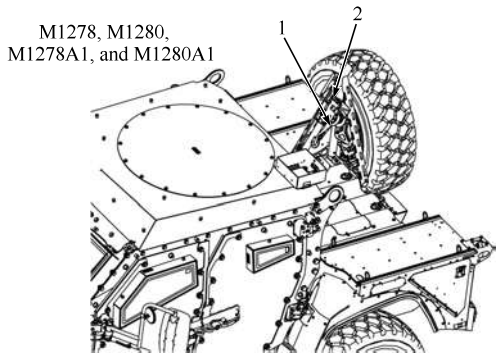


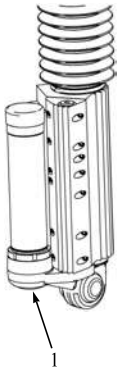
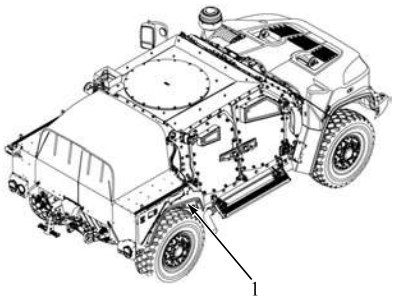
Figure 13. Wheel/Tire.

14	Monthly	(Driver Side Rear) Wheel Hub	Inspect wheel hub (Figure 14, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 14. Wheel Hub.**	
15	Monthly	(Rear of Vehicle) Cargo Cover	**NOTE** The following applies to A0 and A1 variants of M1278, M1279, and M1280 only. Inspect cargo cover (Figure 15, Item 1) for tears, missing straps, and obvious damage.	
			 **Figure 15. Cargo Cover.**	
16	Monthly	(Rear of Vehicle) Damage	Visually inspect rear of vehicle for cracks, corrosion, and obvious damage.	
17	Monthly	(Rear of Vehicle) Rear Electrical Connectors	Inspect rear electrical connectors (Figure 16, Item 1) for damage, bent pins, corrosion, and torn or rotted seals.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 16. Rear Electrical Connectors.**	
18	Monthly	(Rear of Vehicle) Rear Step (if installed)	Inspect rear step (Figure 17, Item 1) for secure mounting, cracks, obvious damage, and proper operation.	
			 **Figure 17. Rear Step.**	
19	Monthly	(Rear of Vehicle) Spare Tire Carrier Winch and Cable (If installed)	1. Inspect spare tire carrier winch (Figure 18, Item 2) for secure mounting, cracks, obvious damage, and proper operation. 2. Inspect spare tire carrier winch cable (Figure 18, Item 1) for fraying and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 18. Spare Tire Carrier Winch and Cable.**	
20	Monthly	(Passenger Side Rear) Suspension System	**WARNING** Use a drain pan or suitable container to capture any draining leaking or spilled oil. Refer to local procedures and plans for preventing and responding to oil spills or leaks. Immediately clean up spilled oil. Comply with local procedures and environmental regulations when disposing of unused oil, soiled/cleanup materials (such as filters and rags), and drained, leaked, or spilled oil. Failure to comply may result in injury to personnel and/or damage to the environment. **NOTE** Shock absorbers may have a thin film of oil on outer surface due to a normal condition known as "misting". Misting is not considered a leak and will not be evident as a stream fluid. Inspect shock absorbers and accumulators (Figure 19, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 19. Suspension System.**	
21	Monthly	(Passenger Side Rear) Fender	**NOTE** The following applies to A0 and A1 variants of M1278, M1280, and M1281 only. Visually inspect rear fender (Figure 20, Item 1) and attaching hardware for cracks, corrosion, and obvious damage.	
			 **Figure 20. Fender.**	
22	Monthly	(Passenger Side Rear) Wheel/Tire	Inspect wheel lug nuts (Figure 21, Item 1) and studs (Figure 21, Item 2) for looseness and obvious damage.	One or more wheel nuts and/or wheel studs missing, loose, or damaged.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

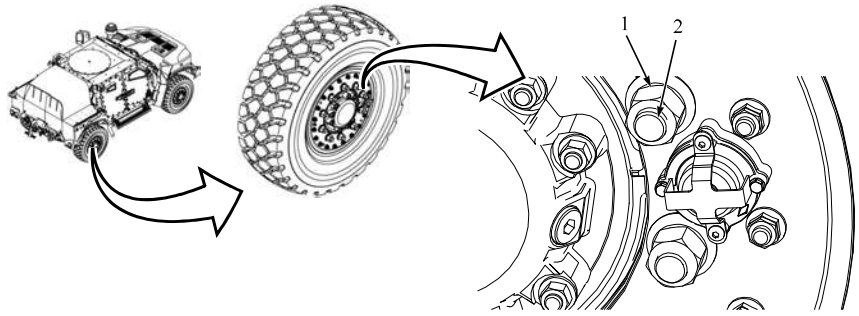


Figure 21. Wheel/Tire.

23	Monthly	(Passenger Side Rear) Wheel Hub	Inspect wheel hub (Figure 22, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

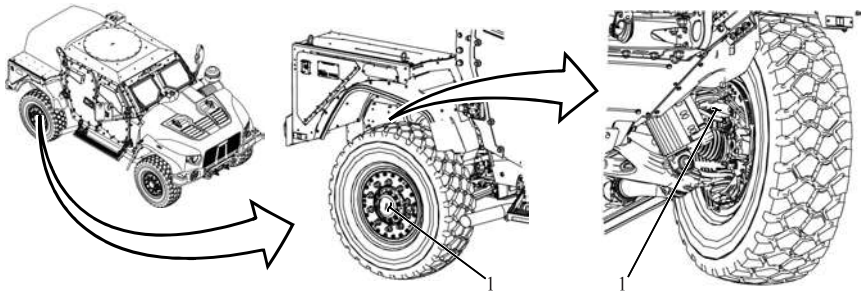
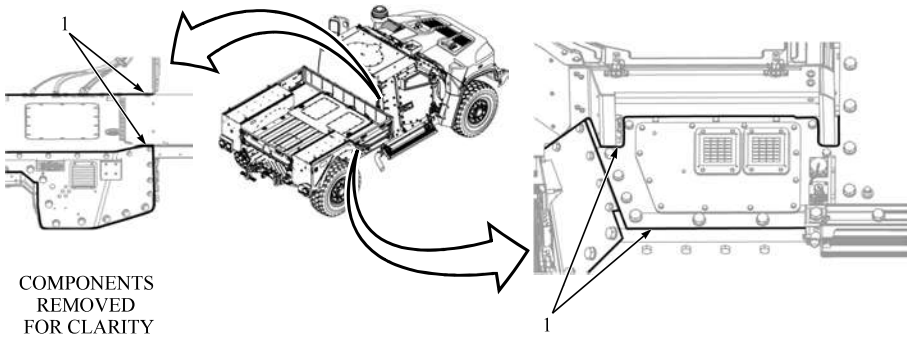


Figure 22. Wheel Hub.

24	Monthly	(Passenger Side Rear) Compart-ment Seam	Inspect sealing compound on all compartment seams (Figure 23, Item 1) for cracks, gaps, and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
 **Figure 23. Compartment Seams.**				
25	Monthly	(Passenger Side) Electronics Box Filter and Electronic Box Filter Covers	**NOTE** The following applies to A0 and A1 variants of M1279 only. 1. Inspect for debris on electronics box filters (WP 0165). **CAUTION** Do not ford vehicle more than 30 in. (762 mm) if seals on filter covers are damaged or missing. Failure to comply may result in damage to equipment. 2. Inspect seals (Figure 24, Item 2) on three electronic box filter covers (Figure 24, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

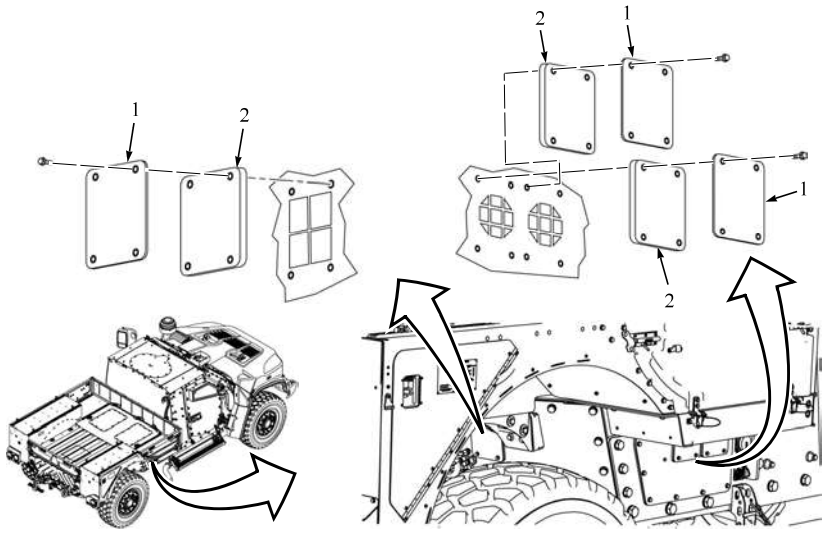


Figure 24. Electronics Box Filter and Electronic Box Filter Covers.

26	Monthly	(Passenger Side) Cab Seams	Inspect sealing compound on rear cab floor seams (Figure 25, Item 1) for cracks, gaps, and obvious damage.	

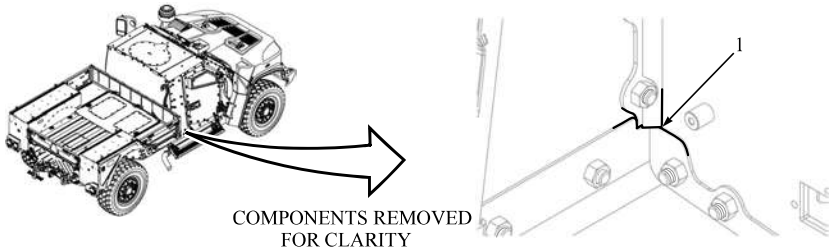


Figure 25. Passenger Side Cab Seams.

27	Monthly	(Passenger Side) Electrical Pass-Thrus	Inspect sealing compound on four electrical pass-thrus (Figure 26, Item 1) for cracks, gaps, and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

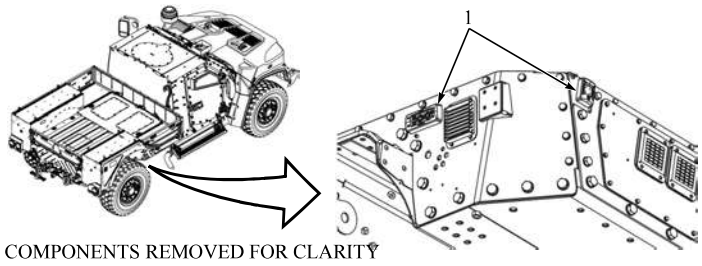


Figure 26. Electrical Pass-Thrus.

28	Monthly	(Passenger Side) Electronic Box Drain Hole	Inspect drain hole (Figure 27, Item 1) for debris.	

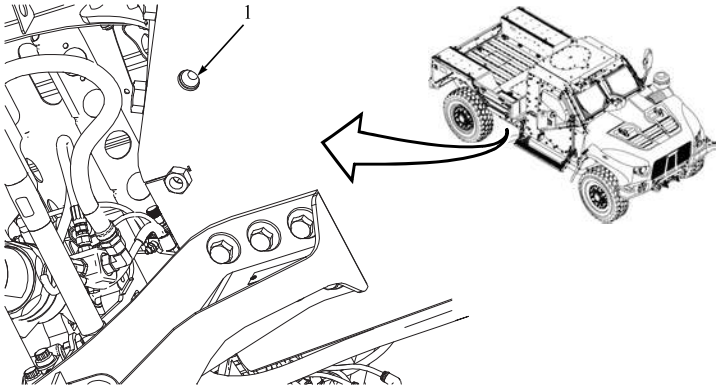
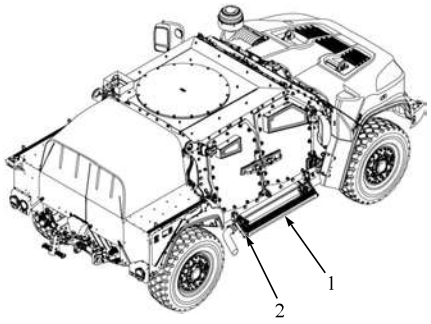
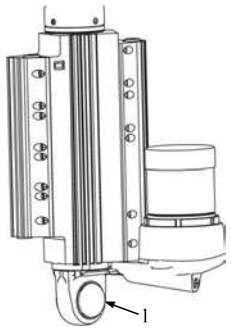
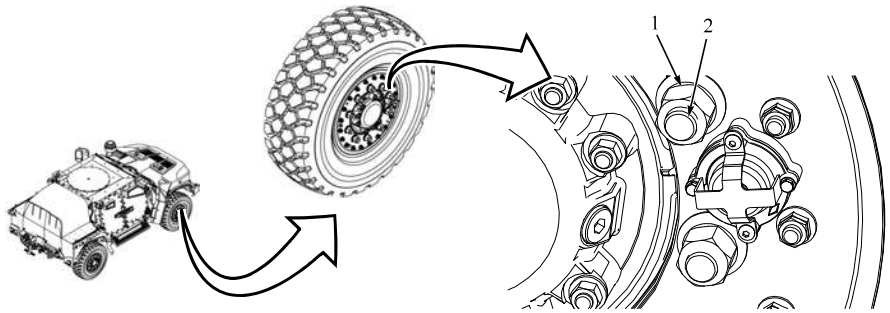
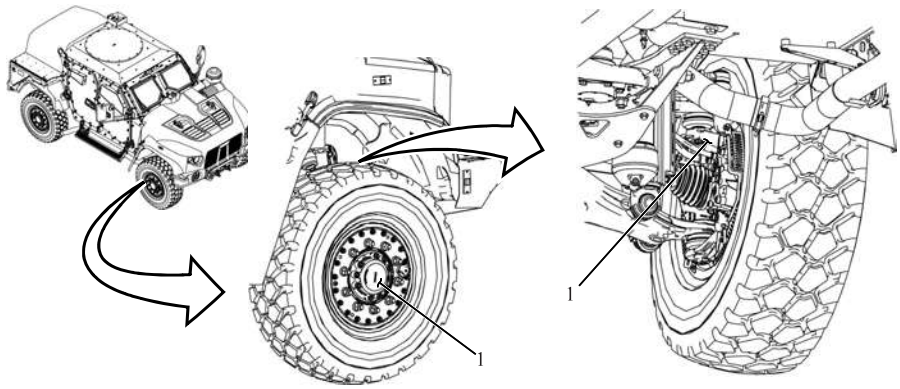


Figure 27. Electronic Box Drain Hole.

29	Monthly	(Passenger Side) Step Assembly	Inspect step (Figure 28, Item 1) and step linkage (Figure 28, Item 2) are present, intact, free of cracks and obvious damage, and all hardware is in place.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 28. Step Assembly.**	
30	Monthly	(Passenger Side Front) Suspension System	**WARNING** Use a drain pan or suitable container to capture any draining leaking or spilled oil. Refer to local procedures and plans for preventing and responding to oil spills or leaks. Immediately clean up spilled oil. Comply with local procedures and environmental regulations when disposing of unused oil, soiled/ cleanup materials (such as filters and rags), and drained, leaked, or spilled oil. Failure to comply may result in injury to personnel and/or damage to the environment. **NOTE** Shock absorbers may have a thin film of oil on outer surface due to a normal condition known as "misting". Misting is not considered a leak and will not be evident as a stream fluid. Inspect shock absorbers and accumulators (Figure 29, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
				
			Figure 29. Suspension System.	
31	Monthly	(Passenger Side Front) Wheel/Tire	Inspect wheel lug nuts (Figure 30, Item 1) and studs (Figure 30, Item 2) for looseness and obvious damage.	One or more wheel nuts and/or wheel studs missing, loose, or damaged.
				
			Figure 30. Wheel/Tire.	
32	Monthly	(Passenger Side Front) Wheel Hub	Inspect wheel hub (Figure 31, Item 1) for leaks and obvious damage.	Any class III leak present or damage which impairs vehicle operation.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 31. Wheel Hub.**	
33	Monthly	(Front of Vehicle) Winch (If equipped)	**NOTE** Refer to Winch Operation (WP 0086) for instructions on how to operate winch for the following checks. 1. Inspect for obvious damage to winch (Figure 32, Item 2). 2. Inspect free spool clutch (Figure 32, Item 3) to ensure spool moves freely. 3. Inspect winch (Figure 32, Item 2) for loose or missing hardware. 4. Inspect winch NATO connector (Figure 32, Item 4) for corrosion. 5. Inspect fairlead (Figure 32, Item 6) for sharp edges. **CAUTION** Maintain tension on winch cable when reeling in. Failure to comply may result in damage to equipment. 6. With aid of an assistant, pay out and reel in winch cable (Figure 32, Item 5) and monitor winch motor (Figure 32, Item 1) for unusual noises and proper operation. 7. Inspect winch cable (Figure 32, Item 5) coating for cracks.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

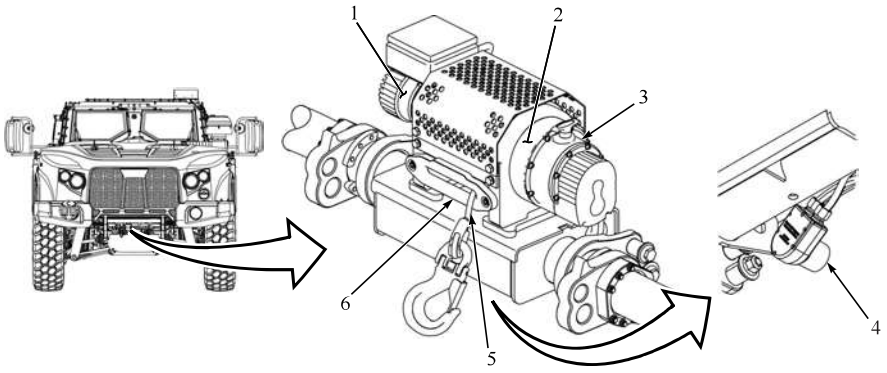


Figure 32. Winch.

34	Monthly	(Front of Vehicle) Combat Bumper (If equipped)	Inspect combat bumper (Figure 33, Item 1) for cracks, damage, and loose or missing hardware.	

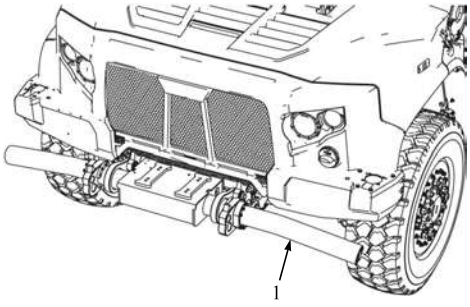
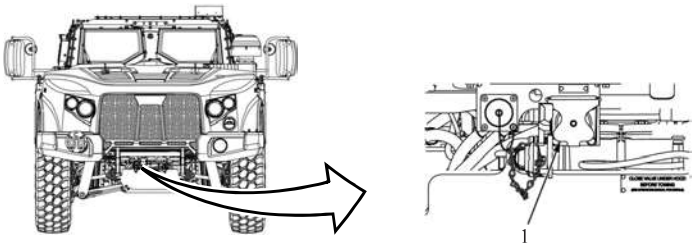
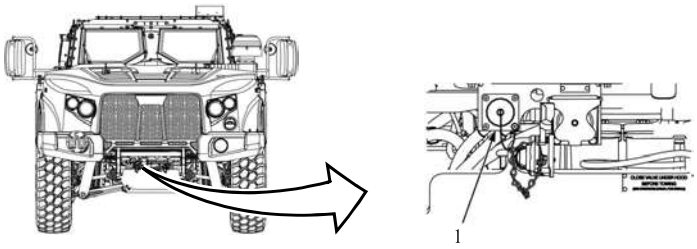


Figure 33. Combat Bumper.

35	Monthly	(Front of Vehicle) Front Electrical Connectors	1. Inspect front electrical connector (Figure 34, Item 1) for damage, bent pins, and torn or rotted steel.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 34. Front Electrical Connectors.**	
			WARNING A direct short may result and cause severe burns or electrical shock if jewelry or tools contact positive electrical circuits. Remove all jewelry such as rings, identification (ID) tags, bracelets, etc., prior to working on or around positive electrical circuits. Failure to comply may result in injury or death to personnel. 2. Inspect NATO receptacle (Figure 35, Item 1) for loose cables, damage, or missing cover.	
			 **Figure 35. Front Electrical Connectors.**	
36	Monthly	(Under-body) Front Skid Plate	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			Inspect front skid plate (Figure 36, Item 1) for cracks, loose hardware, and obvious damage.	

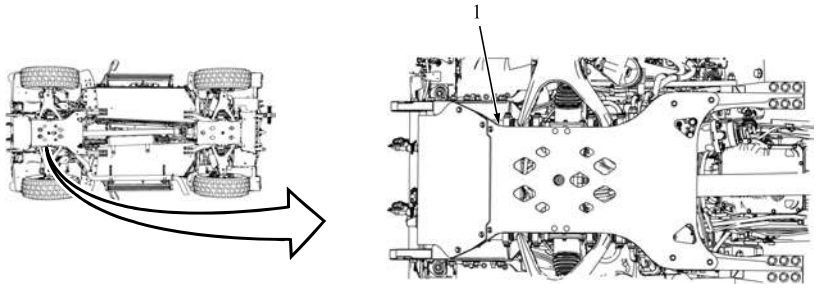


Figure 36. Front Skid Plate.

37	Monthly	(Underbody) Rear Skid Plate	**WARNING** Suspension lock-out braces must be installed prior to crawling under vehicle. Suspension may lower, crushing personnel. Failure to comply may result in injury or death to personnel. Inspect rear skid plate (Figure 37, Item 1) for cracks, loose hardware, and obvious damage.	

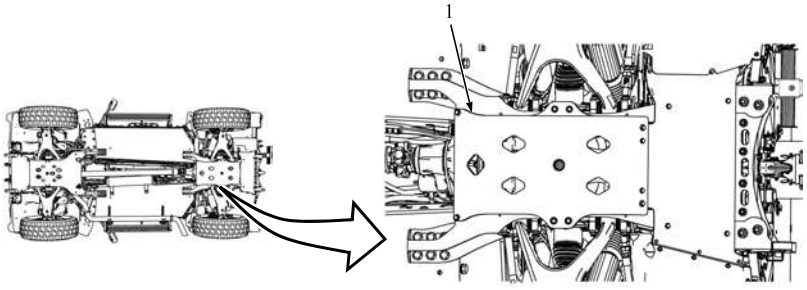


Figure 37. Rear Skid Plate.

38	Monthly	(Top of Vehicle) Cargo Deck	1. Visually inspect cargo deck (Figure 38, Item 1) for cracks, corrosion, and obvious damage.	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

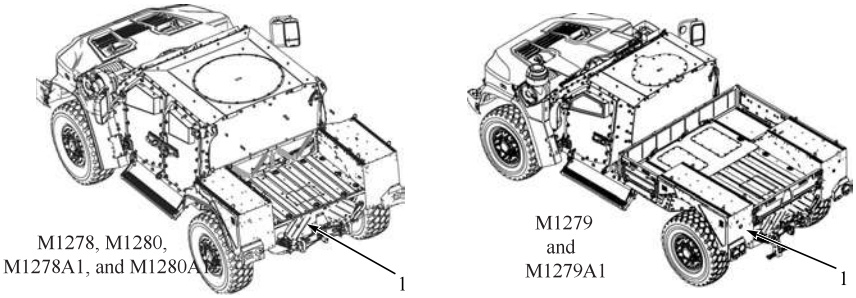


Figure 38. Cargo Deck.

39	Monthly	(Top of Vehicle) Spare Tire Carrier Winch and Cable (If equipped)	1. Inspect spare tire carrier winch (Figure 39, Item 2) for secure mounting, cracks, obvious damage, and proper operation. 2. Inspect spare tire carrier winch cable (Figure 39, Item 1) for fraying and obvious damage. 3. Inspect spare tire straps (Figure 39, Item 3) for frays and obvious damage.	Spare tire straps are missing or damaged.

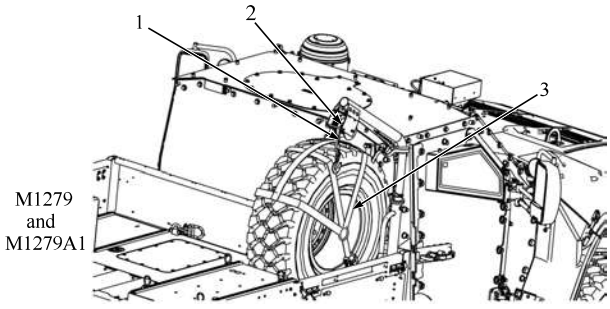


Figure 39. Spare Tire Carrier Winch and Cable.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
40	Monthly	(Engine Compart-ment) Surge Tank	**WARNING** If engine has been recently operated, cooling system will be hot and pressurized. Do not remove surge tank cap while engine is hot; steam and hot coolant can escape and burn personnel. Allow system to cool, and remove cap slowly to relieve pressure. Failure to comply may result in injury or death to personnel. Use a drain pan or suitable container to capture any draining leaking or spilled fuel. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Immediately clean up spilled fuel. Comply with local procedures and environmental regulations when disposing of unused fuel, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fuel. Failure to comply may result in injury to personnel and/or damage to the environment. 1. Raise hood (WP 0041). 2. Inspect surge tank sight glass (Figure 40, Item 3) should appear filled with coolant. 3. Inspect surge tank (Figure 40, Item 2) and cap (Figure 40, Item 1) for cracks, leaks, and obvious damage.	Any class III leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

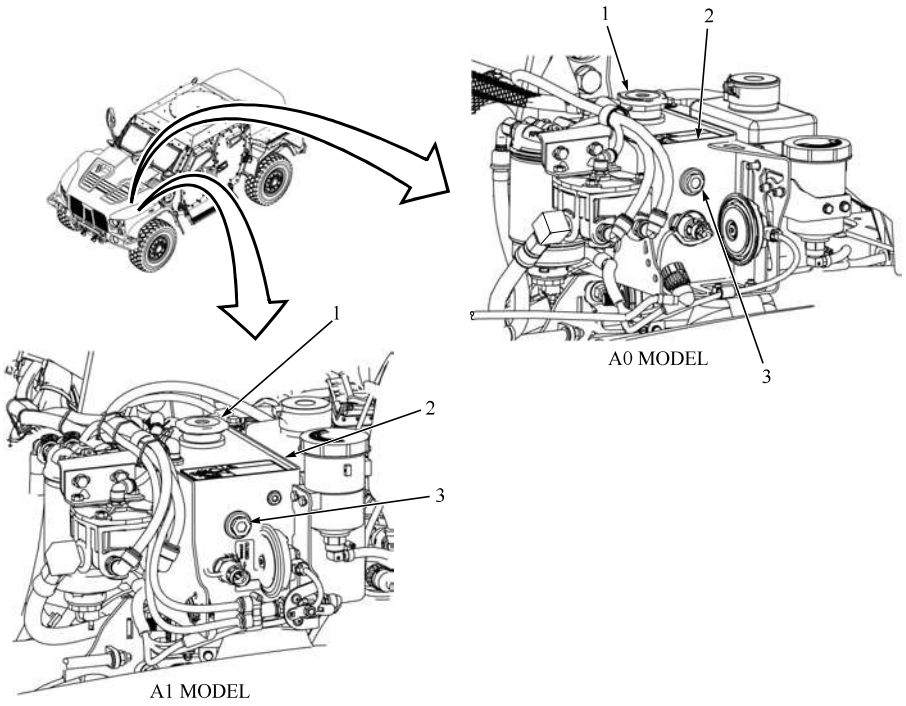
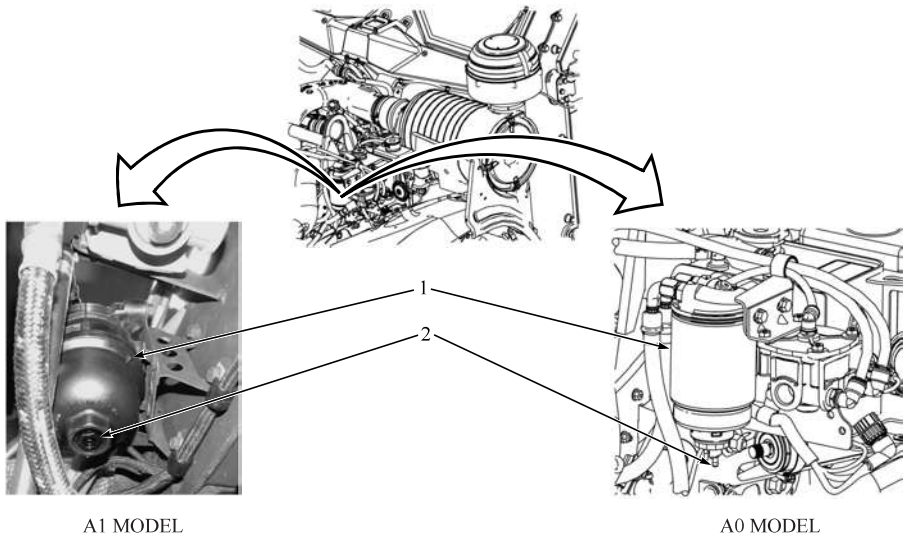


Figure 40. Surge Tank.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
41	Monthly	(Engine Compart-ment) Fuel System	**WARNING** Fuel is flammable and may be ignited by heat, sparks, flames, and static electricity. Avoid open fire and smoking while working around fuel system. Keep fire extinguisher within reach when working with fuel system. Failure to comply may result in injury or death to personnel. Use a drain pan or suitable container to capture any draining leaking or spilled fuel. Refer to local procedures and plans for preventing and responding to fuel spills or leaks. Immediately clean up spilled fuel. Comply with local procedures and environmental regulations when disposing of unused fuel, soiled/cleanup materials (such as filters and rags), and drained, leaked or spilled fuel. Failure to comply may result in injury to personnel and/or damage to the environment. Severe burns may result from engine components that become hot during normal operation. Do not touch hot engine components with bare hands or allow body to contact hot engine components. Failure to comply may result in injury to personnel. 1. Position drain pan under fuel water separator (Figure 41, Item 1). 2. Open drain valve (Figure 41, Item 2). 3. With aid of an assistant, prime fuel system (WP 0158) until clean fuel flows freely from drain valve (Figure 41, Item 2). 4. Perform Step 5 when clean fuel runs from drain valve. 5. Close drain valve (Figure 41, Item 2).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 41. Fuel System.**	
			6. Prime fuel system (WP 0158).	
42	Monthly	(Engine Compartment) Hydraulic Reservoir	Inspect hydraulic oil reservoir oil level to ensure fluid is visible at sight glass (Figure 42, Item 1). If oil is low, add oil until it is visible in sight glass (Figure 42, Item 1).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:

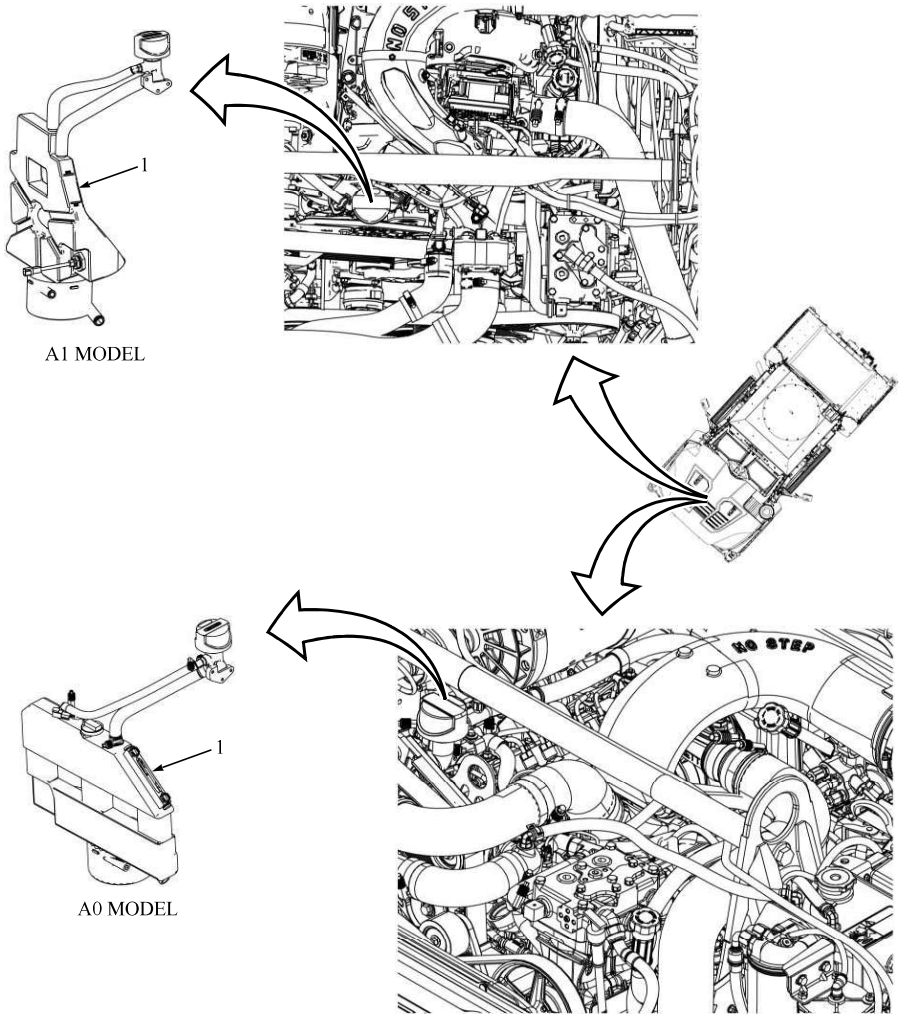
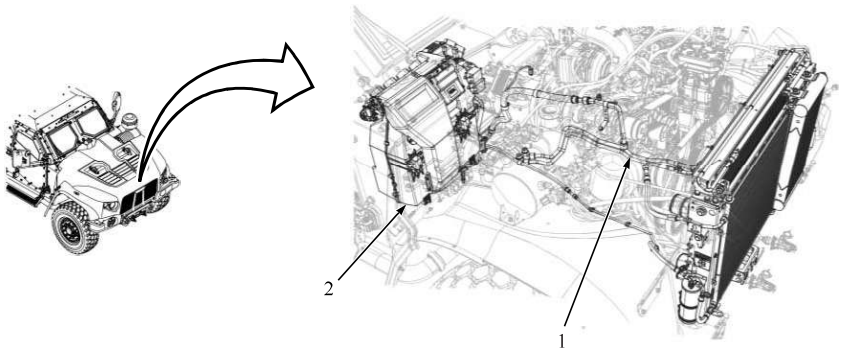


Figure 42. Hydraulic Reservoir.

43	Monthly	(Engine Compartment) Heating, Ventilation, and Air Conditioning (HVAC) System	1. Inspect HVAC unit (Figure 43, Item 2), hoses (Figure 43, Item 1), and fittings for leaks and obvious damage.	Any refrigerant leak present.

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
			 **Figure 43. HVAC System.**	
44	Monthly	(Crew Compartment) Cab Recirculation Filter	Inspect for clogged service cab recirculation filter (WP 0164).	
45	Monthly	(Crew Compartment) Cabin Filter	Inspect for clogged cabin filter (WP 0163).	
46	Monthly	(Crew Compartment) Interior Lights	**NOTE** Refer to Service and B.O. Light Operation (WP 0049) for instructions on how to operate switches needed for the following checks. 1. Ensure overhead light operates in white light mode. 2. Ensure overhead light operates in B.O. mode. 3. Ensure overhead light dimmer switches operate properly. 4. Ensure dash light dimmer switches operate properly. 5. Ensure map lights illuminate. 6. Inspect main instrument panel for proper operation (WP 0043). 7. When light inspections are completed, ensure all lights are turned OFF (WP 0049).	

ITEM NO.	INTERVAL	ITEM TO BE CHECKED OR SERVICED	PROCEDURE	NOT MISSION CAPABLE IF:
47	Monthly	(Crew Compartment) Transaxle	**NOTE** Keep engine running until noted to shut engine off. 1. Start engine (WP 0054). 2. Inspect operation of transaxles (WP 0060). 3. Inspect switch indicator illuminates when toggling transfer case modes (WP 0060).	
48	Monthly	(Crew Compartment) Fording Mode	**CAUTION** Engine may be damaged if engine temperature exceeds normal operating temperature during fording mode inspection. Shut off engine if temperature rises above normal operating temperature. Failure to comply may result in damage to equipment. Inspect operation of fording mode (WP 0076).	
49	Monthly	(Crew Compartment) Floor Plugs (If Fording Kit Installed)	Inspect floor plugs for proper installation and serviceability (WP 0076).	
50	Monthly	(Crew Compartment) Combat Override	1. Inspect operation of combat override (WP 0087). 2. Shut off engine (WP 0054). 3. Drain air tanks (WP 0156).	

END OF WORK PACKAGE